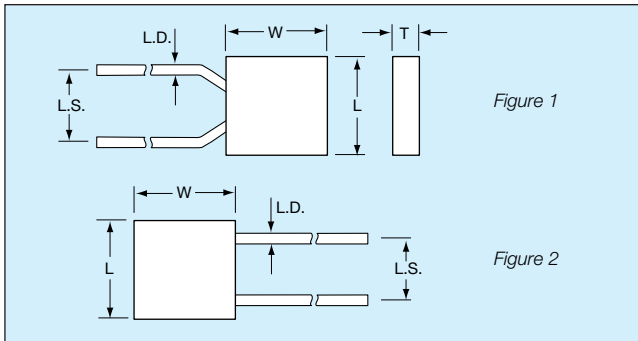


# MIL-PRF-39014/Radial Leads



## HOW TO ORDER

**Military Type Designation: Styles CKR04, CKR05, CKR06, CKR08**

**Dash Number Option: MIL-PRF-39014/01 (Appropriate Dash Number)**

### CKR05

#### Style

CK = General purpose, ceramic dielectric, fixed capacitors  
 R = Established Reliability Parts  
 05 = Remaining two numbers identify shape and dimension

### BX

#### Voltage-Temperature Limits

First letter identifies temperature range.  
 B = -55°C to +125°C  
 Second letter identifies voltage-temperature coefficient.

| Capacitance Change with Reference to 25°C |            |               |
|---|------------|---------------|
| Second Letter                             | No Voltage | Rated Voltage |
| X   | +15, -15%  | +15, -25%     |

### 104

#### Capacitance

First two digits are the significant figures of capacitance. Third digit indicates the additional number of zeros. For example, order 100,000 pF as 104. (For values below 10pF use "R" in place of decimal point, e.g., 1R4 = 1.4pF)

### K

#### Capacitance Tolerance

K = ±10%  
 M = ±20%

### S

#### Military Failure Rate

M = 1% per 1000 hours  
 P = 0.1% per 1000 hours  
 R = 0.01% per 1000 hours  
 S = 0.001% per 1000 hours

Note:  
 AVX reserves the right to substitute a lower failure rate part per MIL-PRF-39014. Substitutability for failure rate levels shall be as follows:

| Failure Rate Level | Will Replace Failure Rate Level |
|--------------------|---------------------------------|
| S (STD) (X-ray)    | R, P, M, L                      |
| R (STD) (No X-ray) | P, M, L                         |
| P                  | M, L                            |
| M                  | L                               |

### (V)

#### Standoff Option

To order standoff option, place "V" at the end of the part number.  
 Example: CKR05BX104KS**V**

## PACKAGING REQUIREMENTS

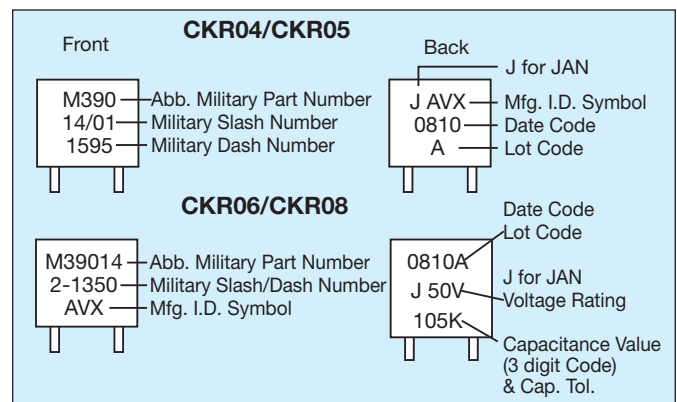
Packaging: 100 Pcs/bag; Radial Tape and Reel Packaging available upon request (2500 pcs./reel).

## SIZE SPECIFICATIONS

Dimensions: Millimeters (Inches)

| Per Mil Spec      | Case Size            |                      |                      |                      |                      |
|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                   | Length (L)           | Width (W)            | Thickness (T)        | Lead Spacing (L.S.)  | Lead Diameter (L.D.) |
| MIL-PRF-39014     |                      |                      |                      |                      |                      |
| CKR04 (Fig. 2)    | 4.83±.25 (.190±.010) | 4.83±.25 (.190±.010) | 2.29±.25 (.090±.010) | 2.54±.38 (.100±.015) | .64±.05 (.025±.002)  |
| CKR05 (Fig. 1, 4) | 4.83±.25 (.190±.010) | 4.83±.25 (.190±.010) | 2.29±.25 (.090±.010) | 5.08±.38 (.200±.015) | .64±.05 (.025±.002)  |
| CKR06 (Fig. 2, 3) | 7.37±.25 (.290±.010) | 7.37±.25 (.290±.010) | 2.29±.25 (.090±.010) | 5.08±.38 (.200±.015) | .64±.05 (.025±.002)  |
| CKR08 (Fig. 2)    | 7.37±.25 (.290±.010) | 7.37±.25 (.290±.010) | 3.68±.38 (.145±.015) | 5.08±.38 (.200±.015) | .64±.05 (.025±.002)  |

## MARKING RADIAL LEAD



# MIL-PRF-39014/Radial Leads



## MILITARY DASH NUMBER IDENTIFICATION CKR04 TO MIL-PRF-39014/23 (Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |         |          |           | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|---------|----------|-----------|------------------|--------------------------------|------|
|                           | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                                |      |
| <b>CKR04 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR04BX100K_              | 0001                               | 0101    | 0201     | 0301      | 10               | 10                             | 200  |
| CKR04BX100M_              | 0002                               | 0102    | 0202     | 0302      | 10               | 20                             | 200  |
| CKR04BX120K_              | 0003                               | 0103    | 0203     | 0303      | 12               | 10                             | 200  |
| CKR04BX150K_              | 0004                               | 0104    | 0204     | 0304      | 15               | 10                             | 200  |
| CKR04BX150M_              | 0005                               | 0105    | 0205     | 0305      | 15               | 20                             | 200  |
| CKR04BX180K_              | 0006                               | 0106    | 0206     | 0306      | 18               | 10                             | 200  |
| CKR04BX220K_              | 0007                               | 0107    | 0207     | 0307      | 22               | 10                             | 200  |
| CKR04BX220M_              | 0008                               | 0108    | 0208     | 0308      | 22               | 20                             | 200  |
| CKR04BX270K_              | 0009                               | 0109    | 0209     | 0309      | 27               | 10                             | 200  |
| CKR04BX330K_              | 0010                               | 0110    | 0210     | 0310      | 33               | 10                             | 200  |
| CKR04BX330M_              | 0011                               | 0111    | 0211     | 0311      | 33               | 20                             | 200  |
| CKR04BX390K_              | 0012                               | 0112    | 0212     | 0312      | 39               | 10                             | 200  |
| CKR04BX470K_              | 0013                               | 0113    | 0213     | 0313      | 47               | 10                             | 200  |
| CKR04BX470M_              | 0014                               | 0114    | 0214     | 0314      | 47               | 20                             | 200  |
| CKR04BX560K_              | 0015                               | 0115    | 0215     | 0315      | 56               | 10                             | 200  |
| CKR04BX680K_              | 0016                               | 0116    | 0216     | 0316      | 68               | 10                             | 200  |
| CKR04BX680M_              | 0017                               | 0117    | 0217     | 0317      | 68               | 20                             | 200  |
| CKR04BX820K_              | 0018                               | 0118    | 0218     | 0318      | 82               | 10                             | 200  |
| CKR04BX101K_              | 0019                               | 0119    | 0219     | 0319      | 100              | 10                             | 200  |
| CKR04BX101M_              | 0020                               | 0120    | 0220     | 0320      | 100              | 20                             | 200  |
| CKR04BX121K_              | 0021                               | 0121    | 0221     | 0321      | 120              | 10                             | 200  |
| CKR04BX151K_              | 0022                               | 0122    | 0222     | 0322      | 150              | 10                             | 200  |
| CKR04BX151M_              | 0023                               | 0123    | 0223     | 0323      | 150              | 20                             | 200  |
| CKR04BX181K_              | 0024                               | 0124    | 0224     | 0324      | 180              | 10                             | 200  |
| CKR04BX221K_              | 0025                               | 0125    | 0225     | 0325      | 220              | 10                             | 200  |
| CKR04BX221M_              | 0026                               | 0126    | 0226     | 0326      | 220              | 20                             | 200  |
| CKR04BX271K_              | 0027                               | 0127    | 0227     | 0327      | 270              | 10                             | 200  |
| CKR04BX331K_              | 0028                               | 0128    | 0228     | 0328      | 330              | 10                             | 200  |
| CKR04BX331M_              | 0029                               | 0129    | 0229     | 0329      | 330              | 20                             | 200  |
| CKR04BX391K_              | 0030                               | 0130    | 0230     | 0330      | 390              | 10                             | 200  |
| CKR04BX471K_              | 0031                               | 0131    | 0231     | 0331      | 470              | 10                             | 200  |
| CKR04BX471M_              | 0032                               | 0132    | 0232     | 0332      | 470              | 20                             | 200  |
| CKR04BX561K_              | 0033                               | 0133    | 0233     | 0333      | 560              | 10                             | 200  |
| CKR04BX681K_              | 0034                               | 0134    | 0234     | 0334      | 680              | 10                             | 200  |
| CKR04BX681M_              | 0035                               | 0135    | 0235     | 0335      | 680              | 20                             | 200  |
| CKR04BX821K_              | 0036                               | 0136    | 0236     | 0336      | 820              | 10                             | 200  |
| CKR04BX102K_              | 0037                               | 0137    | 0237     | 0337      | 1,000            | 10                             | 200  |
| CKR04BX102M_              | 0038                               | 0138    | 0238     | 0338      | 1,000            | 20                             | 200  |
| CKR04BX122K_              | 0039                               | 0139    | 0239     | 0339      | 1,200            | 10                             | 100  |
| CKR04BX152K_              | 0040                               | 0140    | 0240     | 0340      | 1,500            | 10                             | 100  |
| CKR04BX152M_              | 0041                               | 0141    | 0241     | 0341      | 1,500            | 20                             | 100  |
| CKR04BX182K_              | 0042                               | 0142    | 0242     | 0342      | 1,800            | 10                             | 100  |
| CKR04BX222K_              | 0043                               | 0143    | 0243     | 0343      | 2,200            | 10                             | 100  |
| CKR04BX222M_              | 0044                               | 0144    | 0244     | 0344      | 2,200            | 20                             | 100  |
| CKR04BX272K_              | 0045                               | 0145    | 0245     | 0345      | 2,700            | 10                             | 100  |
| CKR04BX332K_              | 0046                               | 0146    | 0246     | 0346      | 3,300            | 10                             | 100  |
| CKR04BX332M_              | 0047                               | 0147    | 0247     | 0347      | 3,300            | 20                             | 100  |
| CKR04BX392K_              | 0048                               | 0148    | 0248     | 0348      | 3,900            | 10                             | 100  |
| CKR04BX472K_              | 0049                               | 0149    | 0249     | 0349      | 4,700            | 10                             | 100  |
| CKR04BX472M_              | 0050                               | 0150    | 0250     | 0350      | 4,700            | 20                             | 100  |
| CKR04BX562K_              | 0051                               | 0151    | 0251     | 0351      | 5,600            | 10                             | 100  |
| CKR04BX682K_              | 0052                               | 0152    | 0252     | 0352      | 6,800            | 10                             | 100  |
| CKR04BX682M_              | 0053                               | 0153    | 0253     | 0353      | 6,800            | 20                             | 100  |
| CKR04BX822K_              | 0054                               | 0154    | 0254     | 0354      | 8,200            | 10                             | 100  |
| CKR04BX103K_              | 0055                               | 0155    | 0255     | 0355      | 10,000           | 10                             | 100  |
| CKR04BX103M_              | 0056                               | 0156    | 0256     | 0356      | 10,000           | 20                             | 100  |
| CKR04BX123K_              | 0057                               | 0157    | 0257     | 0357      | 12,000           | 10                             | 50   |
| CKR04BX153K_              | 0058                               | 0158    | 0258     | 0358      | 15,000           | 10                             | 50   |
| CKR04BX153M_              | 0059                               | 0159    | 0259     | 0359      | 15,000           | 20                             | 50   |
| CKR04BX183K_              | 0060                               | 0160    | 0260     | 0360      | 18,000           | 10                             | 50   |
| CKR04BX223K_              | 0061                               | 0161    | 0261     | 0361      | 22,000           | 10                             | 50   |
| CKR04BX223M_              | 0062                               | 0162    | 0262     | 0362      | 22,000           | 20                             | 50   |
| CKR04BX273K_              | 0063                               | 0163    | 0263     | 0363      | 27,000           | 10                             | 50   |
| CKR04BX333K_              | 0064                               | 0164    | 0264     | 0364      | 33,000           | 10                             | 50   |
| CKR04BX333M_              | 0065                               | 0165    | 0265     | 0365      | 33,000           | 20                             | 50   |
| CKR04BX393K_              | 0066                               | 0166    | 0266     | 0366      | 39,000           | 10                             | 50   |
| CKR04BX473K_              | 0067                               | 0167    | 0267     | 0367      | 47,000           | 10                             | 50   |
| CKR04BX473M_              | 0068                               | 0168    | 0268     | 0368      | 47,000           | 20                             | 50   |
| CKR04BX563K_              | 0069                               | 0169    | 0269     | 0369      | 56,000           | 10                             | 50   |
| CKR04BX683K_              | 0070                               | 0170    | 0270     | 0370      | 68,000           | 10                             | 50   |
| CKR04BX683M_              | 0071                               | 0171    | 0271     | 0371      | 68,000           | 20                             | 50   |
| CKR04BX823K_              | 0072                               | 0172    | 0272     | 0372      | 82,000           | 10                             | 50   |
| CKR04BX104K_              | 0073                               | 0173    | 0273     | 0373      | 100,000          | 10                             | 50   |
| CKR04BX104M_              | 0074                               | 0174    | 0274     | 0374      | 100,000          | 20                             | 50   |

Add appropriate failure rate level letter (M, P, R or S)



## MILITARY DASH NUMBER IDENTIFICATION CKR05 TO MIL-PRF-39014/01 (Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |         |          |           | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|---------|----------|-----------|------------------|--------------------------------|------|
|                           | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                                |      |
| <b>CKR05 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR05BX100K_              | 1201                               | 1241    | 1281     | 1321      | 10               | 10                             | 200  |
| CKR05BX100M_              | 1202                               | 1242    | 1282     | 1322      | 10               | 20                             | 200  |
| CKR05BX120K_              | 1203                               | 1243    | 1283     | 1323      | 12               | 10                             | 200  |
| CKR05BX150K_              | 1204                               | 1244    | 1284     | 1324      | 15               | 10                             | 200  |
| CKR05BX150M_              | 1205                               | 1245    | 1285     | 1325      | 15               | 20                             | 200  |
| CKR05BX180K_              | 1206                               | 1246    | 1286     | 1326      | 18               | 10                             | 200  |
| CKR05BX220K_              | 1207                               | 1247    | 1287     | 1327      | 22               | 10                             | 200  |
| CKR05BX220M_              | 1208                               | 1248    | 1288     | 1328      | 22               | 20                             | 200  |
| CKR05BX270K_              | 1209                               | 1249    | 1289     | 1329      | 27               | 10                             | 200  |
| CKR05BX330K_              | 1210                               | 1250    | 1290     | 1330      | 33               | 10                             | 200  |
| CKR05BX330M_              | 1211                               | 1251    | 1291     | 1331      | 33               | 20                             | 200  |
| CKR05BX390K_              | 1212                               | 1252    | 1292     | 1332      | 39               | 10                             | 200  |
| CKR05BX470K_              | 1213                               | 1253    | 1293     | 1333      | 47               | 10                             | 200  |
| CKR05BX470M_              | 1214                               | 1254    | 1294     | 1334      | 47               | 20                             | 200  |
| CKR05BX560K_              | 1215                               | 1255    | 1295     | 1335      | 56               | 10                             | 200  |
| CKR05BX680K_              | 1216                               | 1256    | 1296     | 1336      | 68               | 10                             | 200  |
| CKR05BX680M_              | 1217                               | 1257    | 1297     | 1337      | 68               | 20                             | 200  |
| CKR05BX820K_              | 1218                               | 1258    | 1298     | 1338      | 82               | 10                             | 200  |
| CKR05BX101K_              | 1219                               | 1259    | 1299     | 1339      | 100              | 10                             | 200  |
| CKR05BX101M_              | 1220                               | 1260    | 1300     | 1340      | 100              | 20                             | 200  |
| CKR05BX121K_              | 1221                               | 1261    | 1301     | 1341      | 120              | 10                             | 200  |
| CKR05BX151K_              | 1222                               | 1262    | 1302     | 1342      | 150              | 10                             | 200  |
| CKR05BX151M_              | 1223                               | 1263    | 1303     | 1343      | 150              | 20                             | 200  |
| CKR05BX181K_              | 1224                               | 1264    | 1304     | 1344      | 180              | 10                             | 200  |
| CKR05BX221K_              | 1225                               | 1265    | 1305     | 1345      | 220              | 10                             | 200  |
| CKR05BX221M_              | 1226                               | 1266    | 1306     | 1346      | 220              | 20                             | 200  |
| CKR05BX271K_              | 1227                               | 1267    | 1307     | 1347      | 270              | 10                             | 200  |
| CKR05BX331K_              | 1228                               | 1268    | 1308     | 1348      | 330              | 10                             | 200  |
| CKR05BX331M_              | 1229                               | 1269    | 1309     | 1349      | 330              | 20                             | 200  |
| CKR05BX391K_              | 1230                               | 1270    | 1310     | 1350      | 390              | 10                             | 200  |
| CKR05BX471K_              | 1231                               | 1271    | 1311     | 1351      | 470              | 10                             | 200  |
| CKR05BX471M_              | 1232                               | 1272    | 1312     | 1352      | 470              | 20                             | 200  |
| CKR05BX561K_              | 1233                               | 1273    | 1313     | 1353      | 560              | 10                             | 200  |
| CKR05BX681K_              | 1234                               | 1274    | 1314     | 1354      | 680              | 10                             | 200  |
| CKR05BX681M_              | 1235                               | 1275    | 1315     | 1355      | 680              | 20                             | 200  |
| CKR05BX821K_              | 1236                               | 1276    | 1316     | 1356      | 820              | 10                             | 200  |
| CKR05BX102K_              | 1237                               | 1277    | 1317     | 1357      | 1,000            | 10                             | 200  |
| CKR05BX102M_              | 1238                               | 1278    | 1318     | 1358      | 1,000            | 20                             | 200  |
| CKR05BX122K_              | 1239                               | 1279    | 1319     | 1359      | 1,200            | 10                             | 100  |
| CKR05BX152K_              | 1240                               | 1280    | 1320     | 1360      | 1,500            | 10                             | 100  |
| CKR05BX152M_              | 1441                               | 1481    | 1521     | 1561      | 1,500            | 20                             | 100  |
| CKR05BX182K_              | 1442                               | 1482    | 1522     | 1562      | 1,800            | 10                             | 100  |
| CKR05BX222K_              | 1443                               | 1483    | 1523     | 1563      | 2,200            | 10                             | 100  |
| CKR05BX222M_              | 1444                               | 1484    | 1524     | 1564      | 2,200            | 20                             | 100  |
| CKR05BX272K_              | 1445                               | 1485    | 1525     | 1565      | 2,700            | 10                             | 100  |
| CKR05BX332K_              | 1446                               | 1486    | 1526     | 1566      | 3,300            | 10                             | 100  |
| CKR05BX332M_              | 1447                               | 1487    | 1527     | 1567      | 3,300            | 20                             | 100  |
| CKR05BX392K_              | 1448                               | 1488    | 1528     | 1568      | 3,900            | 10                             | 100  |
| CKR05BX472K_              | 1449                               | 1489    | 1529     | 1569      | 4,700            | 10                             | 100  |
| CKR05BX472M_              | 1450                               | 1490    | 1530     | 1570      | 4,700            | 20                             | 100  |
| CKR05BX562K_              | 1451                               | 1491    | 1531     | 1571      | 5,600            | 10                             | 100  |
| CKR05BX682K_              | 1452                               | 1492    | 1532     | 1572      | 6,800            | 10                             | 100  |
| CKR05BX682M_              | 1453                               | 1493    | 1533     | 1573      | 6,800            | 20                             | 100  |
| CKR05BX822K_              | 1454                               | 1494    | 1534     | 1574      | 8,200            | 10                             | 100  |
| CKR05BX103K_              | 1455                               | 1495    | 1535     | 1575      | 10,000           | 10                             | 100  |
| CKR05BX103M_              | 1456                               | 1496    | 1536     | 1576      | 10,000           | 20                             | 100  |
| CKR05BX123K_              | 1457                               | 1497    | 1537     | 1577      | 12,000           | 10                             | 50   |
| CKR05BX153K_              | 1458                               | 1498    | 1538     | 1578      | 15,000           | 10                             | 50   |
| CKR05BX153M_              | 1459                               | 1499    | 1539     | 1579      | 15,000           | 20                             | 50   |
| CKR05BX183K_              | 1460                               | 1500    | 1540     | 1580      | 18,000           | 10                             | 50   |
| CKR05BX223K_              | 1461                               | 1501    | 1541     | 1581      | 22,000           | 10                             | 50   |
| CKR05BX223M_              | 1462                               | 1502    | 1542     | 1582      | 22,000           | 20                             | 50   |
| CKR05BX273K_              | 1463                               | 1503    | 1543     | 1583      | 27,000           | 10                             | 50   |
| CKR05BX333K_              | 1464                               | 1504    | 1544     | 1584      | 33,000           | 10                             | 50   |
| CKR05BX333M_              | 1465                               | 1505    | 1545     | 1585      | 33,000           | 20                             | 50   |
| CKR05BX393K_              | 1466                               | 1506    | 1546     | 1586      | 39,000           | 10                             | 50   |
| CKR05BX473K_              | 1467                               | 1507    | 1547     | 1587      | 47,000           | 10                             | 50   |
| CKR05BX473M_              | 1468                               | 1508    | 1548     | 1588      | 47,000           | 20                             | 50   |
| CKR05BX563K_              | 1469                               | 1509    | 1549     | 1589      | 56,000           | 10                             | 50   |
| CKR05BX683K_              | 1470                               | 1510    | 1550     | 1590      | 68,000           | 10                             | 50   |
| CKR05BX683M_              | 1471                               | 1511    | 1551     | 1591      | 68,000           | 20                             | 50   |
| CKR05BX823K_              | 1472                               | 1512    | 1552     | 1592      | 82,000           | 10                             | 50   |
| CKR05BX104K_              | 1473                               | 1513    | 1553     | 1593      | 100,000          | 10                             | 50   |
| CKR05BX104M_              | 1474                               | 1514    | 1554     | 1594      | 100,000          | 20                             | 50   |

Add appropriate failure rate level letter (M, P, R or S)

## MILITARY DASH NUMBER IDENTIFICATION CKR06 TO MIL-PRF-39014/02

(Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |         |          |           | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|---------|----------|-----------|------------------|--------------------------------|------|
|                           | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                                |      |
| <b>CKR06 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR06BX122K_              | 1201                               | 1241    | 1281     | 1321      | 1200             | 10                             | 200  |
| CKR06BX152K_              | 1202                               | 1242    | 1282     | 1322      | 1500             | 10                             | 200  |
| CKR06BX152M_              | 1203                               | 1243    | 1283     | 1323      | 1500             | 20                             | 200  |
| CKR06BX182K_              | 1204                               | 1244    | 1284     | 1324      | 1800             | 10                             | 200  |
| CKR06BX222K_              | 1206                               | 1246    | 1286     | 1326      | 2200             | 10                             | 200  |
| CKR06BX222M_              | 1207                               | 1247    | 1287     | 1327      | 2200             | 20                             | 200  |
| CKR06BX272K_              | 1208                               | 1248    | 1288     | 1328      | 2700             | 10                             | 200  |
| CKR06BX332K_              | 1209                               | 1249    | 1289     | 1329      | 3300             | 10                             | 200  |
| CKR06BX332M_              | 1210                               | 1250    | 1290     | 1330      | 3300             | 20                             | 200  |
| CKR06BX392K_              | 1211                               | 1251    | 1291     | 1331      | 3900             | 10                             | 200  |
| CKR06BX472K_              | 1212                               | 1252    | 1292     | 1332      | 4700             | 10                             | 200  |
| CKR06BX472M_              | 1213                               | 1253    | 1293     | 1333      | 4700             | 20                             | 200  |
| CKR06BX562K_              | 1214                               | 1254    | 1294     | 1334      | 5600             | 10                             | 200  |
| CKR06BX682K_              | 1215                               | 1255    | 1295     | 1335      | 6800             | 10                             | 200  |
| CKR06BX682M_              | 1216                               | 1256    | 1296     | 1336      | 6800             | 20                             | 200  |
| CKR06BX822K_              | 1217                               | 1257    | 1297     | 1337      | 8200             | 10                             | 200  |
| CKR06BX103K_              | 1218                               | 1258    | 1298     | 1338      | 10,000           | 10                             | 200  |
| CKR06BX103M_              | 1219                               | 1259    | 1299     | 1339      | 10,000           | 20                             | 200  |
| CKR06BX123K_              | 1231                               | 1271    | 1311     | 1351      | 12,000           | 10                             | 100  |
| CKR06BX153K_              | 1220                               | 1260    | 1300     | 1340      | 15,000           | 10                             | 100  |
| CKR06BX183K_              | 1221                               | 1261    | 1301     | 1341      | 18,000           | 10                             | 100  |
| CKR06BX223K_              | 1222                               | 1262    | 1302     | 1342      | 22,000           | 10                             | 100  |
| CKR06BX273K_              | 1232                               | 1272    | 1312     | 1352      | 27,000           | 10                             | 100  |
| CKR06BX333K_              | 1223                               | 1263    | 1303     | 1343      | 33,000           | 10                             | 100  |
| CKR06BX393K_              | 1224                               | 1264    | 1304     | 1344      | 39,000           | 10                             | 100  |
| CKR06BX473K_              | 1225                               | 1265    | 1305     | 1345      | 47,000           | 10                             | 100  |
| CKR06BX563K_              | 1226                               | 1266    | 1306     | 1346      | 56,000           | 10                             | 100  |
| CKR06BX683K_              | 1227                               | 1267    | 1307     | 1347      | 68,000           | 10                             | 100  |
| CKR06BX823K_              | 1229                               | 1269    | 1309     | 1349      | 82,000           | 10                             | 100  |
| CKR06BX104K_              | 1230                               | 1270    | 1310     | 1350      | 100,000          | 10                             | 100  |
| CKR06BX124K_              | 1233                               | 1273    | 1313     | 1353      | 120,000          | 10                             | 50   |
| CKR06BX154K_              | 1234                               | 1274    | 1314     | 1354      | 150,000          | 10                             | 50   |
| CKR06BX184K_              | 1235                               | 1275    | 1315     | 1355      | 180,000          | 10                             | 50   |
| CKR06BX224K_              | 1236                               | 1276    | 1316     | 1356      | 220,000          | 10                             | 50   |
| CKR06BX274K_              | 1237                               | 1277    | 1317     | 1357      | 270,000          | 10                             | 50   |
| CKR06BX334K_              | 1238                               | 1278    | 1318     | 1358      | 330,000          | 10                             | 50   |
| CKR06BX394K_              | 1239                               | 1279    | 1319     | 1359      | 390,000          | 10                             | 50   |
| CKR06BX474K_              | 1240                               | 1280    | 1320     | 1360      | 470,000          | 10                             | 50   |
| CKR06BX564K_              | 1404                               | 1408    | 1412     | 1416      | 560,000          | 10                             | 50   |
| CKR06BX684K_              | 1405                               | 1409    | 1413     | 1417      | 680,000          | 10                             | 50   |
| CKR06BX824K_              | 1406                               | 1410    | 1414     | 1418      | 820,000          | 10                             | 50   |
| CKR06BX105K_              | 1407                               | 1411    | 1415     | 1419      | 1,000,000        | 10                             | 50   |

— Add appropriate failure rate level letter (M, P, R or S)

## CKR08 to MIL-PRF-39014/20 (Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |  | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|--|------------------|--------------------------------|------|
|                           | 1.0 (M)                            |  |                  |                                |      |
| <b>CKR08 (BX)</b>         |                                    |  |                  |                                |      |
| CKR08BX125K_              | 0104                               |  | 1,200,000        | 10                             | 50   |
| CKR08BX155K_              | 0105                               |  | 1,500,000        | 10                             | 50   |
| CKR08BX205K_              | 0106                               |  | 2,000,000        | 10                             | 50   |

— Add appropriate failure rate level letter (M)

## CROSS REFERENCE CHART - AVX MILITARY FOR MOLDED RADIAL LEAD

| Figure | AVX Style | Per Mil-Spec |               |            | Case Size             |                       |                      |                       |                     |
|--------|-----------|--------------|---------------|------------|-----------------------|-----------------------|----------------------|-----------------------|---------------------|
|        |           | MIL-C-11015  | MIL-PRF-39014 | MIL-PRF-20 | Length(L)             | Width (W)             | Thickness (T)        | Lead Spacing (LS)     | Lead Diameter (LD)  |
| 1      | MR05      | CK05         | CKR05         | CCR05/CC05 | 4.83±.25 (.190±.010)  | 4.83±.25 (.190±.010)  | 2.29±.25 (.090±.010) | 5.08±.38 (.200±.015)  | .64±.05 (.025±.002) |
| 2      | MR04      | —            | CKR04         | CCR09/CC09 | 4.83±.25 (.190±.010)  | 4.83±.25 (.190±.010)  | 2.29±.25 (.090±.010) | 2.54±.38 (.100±.015)  | .64±.05 (.025±.002) |
| 2      | MR06      | CK06         | CKR06         | CCR06/CC06 | 7.37±.25 (.290±.010)  | 7.37±.25 (.290±.010)  | 2.29±.25 (.090±.010) | 5.08±.38 (.200±.015)  | .64±.05 (.025±.002) |
| 2      | MR68      | —            | CKR08         | —          | 7.37±.25 (.290±.010)  | 7.37±.25 (.290±.010)  | 3.68±.38 (.145±.015) | 5.08±.38 (.200±.015)  | .64±.05 (.025±.002) |
| 2      | MR07      | —            | —             | CCR07/CC07 | 12.19±.51 (.480±.020) | 12.19±.51 (.480±.020) | 3.56±.25 (.140±.010) | 10.16±.51 (.400±.020) | .64±.05 (.025±.002) |
| 2      | MR08      | —            | —             | CCR08/CC08 | 12.19±.51 (.480±.020) | 12.19±.51 (.480±.020) | 6.1±.25 (.240±.010)  | 10.16±.51 (.400±.020) | .64±.05 (.025±.002) |

Dimensions: Millimeters (Inches)



## HOW TO ORDER

**Military Type Designation: Styles CKR11, CKR12, CKR14, CKR15, CKR16**

**Dash Number Option: MIL-PRF-39014/05 (Add Appropriate Dash Number)**

### CKR11

#### Style

CK = General purpose, ceramic dielectric, fixed capacitors  
 R = Established Reliability parts  
 11 = Remaining two numbers identify shape and dimension

### BX

#### Voltage-Temperature Limits

First letter identifies temperature range.  
 B = -55°C to +125°C  
 Second letter identifies voltage-temperature coefficient.

| Capacitance Change with Reference to 25°C |            |               |
|---|------------|---------------|
| Second Letter                             | No Voltage | Rated Voltage |
| R   | +15, -15%  | +15, -40%     |
| X   | +15, -15%  | +15, -25%     |

### 103

#### Capacitance

First two digits are the significant figures of capacitance. Third digit indicates the additional number of zeros. For example, order 10,000 pF as 103.

### K

#### Capacitance Tolerance

K = ±10%  
 M = ±20%

### S

#### Military Failure Rate

M = 1% per 1000 hours  
 P = 0.1% per 1000 hours  
 R = 0.01% per 1000 hours  
 S = 0.001% per 1000 hours

Note:

AVX reserves the right to substitute a lower failure rate part per MIL-PRF-39014/5E.

Substitutability for failure rate levels shall be as follows:

| Failure Rate Level | Will Replace Failure Rate Level |
|--------------------|---------------------------------|
| S (STD) (X-ray)    | R, P, M, L                      |
| R (STD) (No X-ray) | P, M, L                         |
| P                  | M, L                            |
| M                  | L                               |

## PACKAGING REQUIREMENTS

### Packaging: Bulk

CKR11, 12, & 14      100 pcs per bag  
 CKR15 & 16          50 pcs per bag

### Tape & Reel

CKR11, 12            5000 pcs per reel  
 CKR14                3000 pcs per reel  
 CKR15                950 pcs per reel  
 CKR16                650 pcs per reel

## SIZE SPECIFICATIONS

Dimensions: Millimeters (Inches)

| Per Mil Spec  | Case Size                |                         |                         |
|---------------|--------------------------|-------------------------|-------------------------|
|               | Length (L)               | Diameter (D)            | Lead Diameter (L.D.)    |
| MIL-PRF-39014 |                          |                         |                         |
| CKR11         | 4.07±.25<br>(.160±.010)  | 2.29±.25<br>(.090±.010) | .48±.05<br>(.019±.002)  |
| CKR12         | 6.35±.25<br>(.250±.010)  | 2.29±.25<br>(.090±.010) | .48±.05<br>(.019±.002)  |
| CKR14         | 9.91±.25<br>(.390±.010)  | 3.56±.25<br>(.140±.010) | .63±.025<br>(.025±.002) |
| CKR15         | 12.7±.51<br>(.500±.020)  | 6.35±.38<br>(.250±.015) | .63±.05<br>(.025±.002)  |
| CKR16         | 17.53±.51<br>(.690±.020) | 8.89±.51<br>(.350±.020) | .63±.05<br>(.025±.002)  |

## MILITARY DASH NUMBER IDENTIFICATION CKR11 TO MIL-PRF-39014/05 (Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |         |          |           | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|---------|----------|-----------|------------------|--------------------------------|------|
|                           | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                                |      |
| <b>CKR11 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR11BX100K_              | 2601                               | 2801    | 2001     | 2201      | 10               | 10                             | 100  |
| CKR11BX100M_              | 2602                               | 2802    | 2002     | 2202      | 10               | 20                             | 100  |
| CKR11BX120K_              | 2603                               | 2803    | 2003     | 2203      | 12               | 10                             | 100  |
| CKR11BX150K_              | 2604                               | 2804    | 2004     | 2204      | 15               | 10                             | 100  |
| CKR11BX150M_              | 2605                               | 2805    | 2005     | 2205      | 15               | 20                             | 100  |
| CKR11BX180K_              | 2606                               | 2806    | 2006     | 2206      | 18               | 10                             | 100  |
| CKR11BX220K_              | 2607                               | 2807    | 2007     | 2207      | 22               | 10                             | 100  |
| CKR11BX220M_              | 2608                               | 2808    | 2008     | 2208      | 22               | 20                             | 100  |
| CKR11BX270K_              | 2609                               | 2809    | 2009     | 2209      | 27               | 10                             | 100  |
| CKR11BX330K_              | 2610                               | 2810    | 2010     | 2210      | 33               | 10                             | 100  |
| CKR11BX330M_              | 2611                               | 2811    | 2011     | 2211      | 33               | 20                             | 100  |
| CKR11BX390K_              | 2612                               | 2812    | 2012     | 2212      | 39               | 10                             | 100  |
| CKR11BX470K_              | 2613                               | 2813    | 2013     | 2213      | 47               | 10                             | 100  |
| CKR11BX470M_              | 2614                               | 2814    | 2014     | 2214      | 47               | 20                             | 100  |
| CKR11BX560K_              | 2615                               | 2815    | 2015     | 2215      | 56               | 10                             | 100  |
| CKR11BX680K_              | 2616                               | 2816    | 2016     | 2216      | 68               | 10                             | 100  |
| CKR11BX680M_              | 2617                               | 2817    | 2017     | 2217      | 68               | 20                             | 100  |
| CKR11BX820K_              | 2618                               | 2818    | 2018     | 2218      | 82               | 10                             | 100  |
| CKR11BX101K_              | 2619                               | 2819    | 2019     | 2219      | 100              | 10                             | 100  |
| CKR11BX101M_              | 2620                               | 2820    | 2020     | 2220      | 100              | 20                             | 100  |
| CKR11BX121K_              | 2621                               | 2821    | 2021     | 2221      | 120              | 10                             | 100  |
| CKR11BX151K_              | 2622                               | 2822    | 2022     | 2222      | 150              | 10                             | 100  |
| CKR11BX151M_              | 2623                               | 2823    | 2023     | 2223      | 150              | 20                             | 100  |
| CKR11BX181K_              | 2624                               | 2824    | 2024     | 2224      | 180              | 10                             | 100  |
| CKR11BX221K_              | 2625                               | 2825    | 2025     | 2225      | 220              | 10                             | 100  |
| CKR11BX221M_              | 2626                               | 2826    | 2026     | 2226      | 220              | 20                             | 100  |
| CKR11BX271K_              | 2627                               | 2827    | 2027     | 2227      | 270              | 10                             | 100  |
| CKR11BX331K_              | 2628                               | 2828    | 2028     | 2228      | 330              | 10                             | 100  |
| CKR11BX331M_              | 2629                               | 2829    | 2029     | 2229      | 330              | 20                             | 100  |
| CKR11BX391K_              | 2630                               | 2830    | 2030     | 2230      | 390              | 10                             | 100  |
| CKR11BX471K_              | 2631                               | 2831    | 2031     | 2231      | 470              | 10                             | 100  |
| CKR11BX471M_              | 2632                               | 2832    | 2032     | 2232      | 470              | 20                             | 100  |
| CKR11BX561K_              | 2633                               | 2833    | 2033     | 2233      | 560              | 10                             | 100  |
| CKR11BX681K_              | 2634                               | 2834    | 2034     | 2234      | 680              | 10                             | 100  |
| CKR11BX681M_              | 2635                               | 2835    | 2035     | 2235      | 680              | 20                             | 100  |
| CKR11BX821K_              | 2636                               | 2836    | 2036     | 2236      | 820              | 10                             | 100  |
| CKR11BX102K_              | 2637                               | 2837    | 2037     | 2237      | 1000             | 10                             | 100  |
| CKR11BX102M_              | 2638                               | 2838    | 2038     | 2238      | 1000             | 20                             | 100  |
| CKR11BX122K_              | 2639                               | 2839    | 2039     | 2239      | 1200             | 10                             | 100  |
| CKR11BX152K_              | 2640                               | 2840    | 2040     | 2240      | 1500             | 10                             | 100  |
| CKR11BX152M_              | 2641                               | 2841    | 2041     | 2241      | 1500             | 20                             | 100  |
| CKR11BX182K_              | 2642                               | 2842    | 2042     | 2242      | 1800             | 10                             | 100  |
| CKR11BX222K_              | 2643                               | 2843    | 2043     | 2243      | 2200             | 10                             | 100  |
| CKR11BX222M_              | 2644                               | 2844    | 2044     | 2244      | 2200             | 20                             | 100  |
| CKR11BX272K_              | 2645                               | 2845    | 2045     | 2245      | 2700             | 10                             | 100  |
| CKR11BX332K_              | 2646                               | 2846    | 2046     | 2246      | 3300             | 10                             | 100  |
| CKR11BX332M_              | 2647                               | 2847    | 2047     | 2247      | 3300             | 20                             | 100  |
| CKR11BX392K_              | 2648                               | 2848    | 2048     | 2248      | 3900             | 10                             | 100  |
| CKR11BX472K_              | 2649                               | 2849    | 2049     | 2249      | 4700             | 10                             | 100  |
| CKR11BX472M_              | 2650                               | 2850    | 2050     | 2250      | 4700             | 20                             | 100  |
| CKR11BX562K_              | 2651                               | 2851    | 2051     | 2251      | 5600             | 10                             | 50   |
| CKR11BX682K_              | 2652                               | 2852    | 2052     | 2252      | 6800             | 10                             | 50   |
| CKR11BX682M_              | 2653                               | 2853    | 2053     | 2253      | 6800             | 20                             | 50   |
| CKR11BX822K_              | 2654                               | 2854    | 2054     | 2254      | 8200             | 10                             | 50   |
| CKR11BX103K_              | 2655                               | 2855    | 2055     | 2255      | 10,000           | 10                             | 50   |
| CKR11BX103M_              | 2656                               | 2856    | 2056     | 2256      | 10,000           | 20                             | 50   |

— Add appropriate failure rate level letter (M, P, R or S)

## MILITARY DASH NUMBER IDENTIFICATION CKR12/14/15 TO MIL-PRF-39014/05 (Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |         |          |           | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|---------|----------|-----------|------------------|--------------------------------|------|
|                           | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                                |      |
| <b>CKR12 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR12BX562K_              | 2657                               | 2857    | 2057     | 2257      | 5600             | 10                             | 100  |
| CKR12BX682K_              | 2658                               | 2858    | 2058     | 2258      | 6800             | 10                             | 100  |
| CKR12BX682M_              | 2659                               | 2859    | 2059     | 2259      | 6800             | 20                             | 100  |
| CKR12BX822K_              | 2660                               | 2860    | 2060     | 2260      | 8200             | 10                             | 100  |
| CKR12BX103K_              | 2661                               | 2861    | 2061     | 2261      | 10,000           | 10                             | 100  |
| CKR12BX103M_              | 2662                               | 2862    | 2062     | 2262      | 10,000           | 20                             | 100  |
| CKR12BX123K_              | 2663                               | 2863    | 2063     | 2263      | 12,000           | 10                             | 50   |
| CKR12BX153K_              | 2664                               | 2864    | 2064     | 2264      | 15,000           | 10                             | 50   |
| CKR12BX153M_              | 2665                               | 2865    | 2065     | 2265      | 15,000           | 20                             | 50   |
| CKR12BX183K_              | 2666                               | 2866    | 2066     | 2266      | 18,000           | 10                             | 50   |
| CKR12BX223K_              | 2667                               | 2867    | 2067     | 2267      | 22,000           | 10                             | 50   |
| CKR12BX223M_              | 2668                               | 2868    | 2068     | 2268      | 22,000           | 20                             | 50   |
| CKR12BX273K_              | 2669                               | 2869    | 2069     | 2269      | 27,000           | 10                             | 50   |
| CKR12BX333K_              | 2670                               | 2870    | 2070     | 2270      | 33,000           | 10                             | 50   |
| CKR12BX333M_              | 2671                               | 2871    | 2071     | 2271      | 33,000           | 20                             | 50   |
| CKR12BX393K_              | 2672                               | 2872    | 2072     | 2272      | 39,000           | 10                             | 50   |
| CKR12BX473K_              | 2673                               | 2873    | 2073     | 2273      | 47,000           | 10                             | 50   |
| CKR12BX473M_              | 2674                               | 2874    | 2074     | 2274      | 47,000           | 20                             | 50   |
| <b>CKR14 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR14BX123K_              | 2675                               | 2875    | 2075     | 2275      | 12,000           | 10                             | 100  |
| CKR14BX153K_              | 2676                               | 2876    | 2076     | 2276      | 15,000           | 10                             | 100  |
| CKR14BX153M_              | 2677                               | 2877    | 2077     | 2277      | 15,000           | 20                             | 100  |
| CKR14BX183K_              | 2678                               | 2878    | 2078     | 2278      | 18,000           | 10                             | 100  |
| CKR14BX223K_              | 2679                               | 2879    | 2079     | 2279      | 22,000           | 10                             | 100  |
| CKR14BX223M_              | 2680                               | 2880    | 2080     | 2280      | 22,000           | 20                             | 100  |
| CKR14BX273K_              | 2681                               | 2881    | 2081     | 2281      | 27,000           | 10                             | 100  |
| CKR14BX333K_              | 2682                               | 2882    | 2082     | 2282      | 33,000           | 10                             | 100  |
| CKR14BX333M_              | 2683                               | 2883    | 2083     | 2283      | 33,000           | 20                             | 100  |
| CKR14BX393K_              | 2684                               | 2884    | 2084     | 2284      | 39,000           | 10                             | 100  |
| CKR14BX473K_              | 2685                               | 2885    | 2085     | 2285      | 47,000           | 10                             | 100  |
| CKR14BX473M_              | 2686                               | 2886    | 2086     | 2286      | 47,000           | 20                             | 100  |
| CKR14BX563K_              | 2687                               | 2887    | 2087     | 2287      | 56,000           | 10                             | 50   |
| CKR14BX683K_              | 2688                               | 2888    | 2088     | 2288      | 68,000           | 10                             | 50   |
| CKR14BX683M_              | 2689                               | 2889    | 2089     | 2289      | 68,000           | 20                             | 50   |
| CKR14BX823K_              | 2690                               | 2890    | 2090     | 2290      | 82,000           | 10                             | 50   |
| CKR14BX104K_              | 2691                               | 2891    | 2091     | 2291      | 100,000          | 10                             | 50   |
| CKR14BX104M_              | 2692                               | 2892    | 2092     | 2292      | 100,000          | 20                             | 50   |
| <b>CKR14 (BR)</b>         |                                    |         |          |           |                  |                                |      |
| CKR14BR563K_              | 2693                               | 2893    | 2093     | 2293      | 56,000           | 10                             | 100  |
| CKR14BR683K_              | 2694                               | 2894    | 2094     | 2294      | 68,000           | 10                             | 100  |
| CKR14BR683M_              | 2695                               | 2895    | 2095     | 2295      | 68,000           | 20                             | 100  |
| CKR14BR823K_              | 2696                               | 2896    | 2096     | 2296      | 82,000           | 10                             | 100  |
| CKR14BR104K_              | 2697                               | 2897    | 2097     | 2297      | 100,000          | 10                             | 100  |
| CKR14BR104M_              | 2698                               | 2898    | 2098     | 2298      | 100,000          | 20                             | 100  |
| CKR14BR124K_              | 2699                               | 2899    | 2099     | 2299      | 120,000          | 10                             | 50   |
| CKR14BR154K_              | 2700                               | 2900    | 2100     | 2300      | 150,000          | 10                             | 50   |
| CKR14BR154M_              | 2701                               | 2901    | 2101     | 2301      | 150,000          | 20                             | 50   |
| CKR14BR184K_              | 2702                               | 2902    | 2102     | 2302      | 180,000          | 10                             | 50   |
| CKR14BR224K_              | 2703                               | 2903    | 2103     | 2303      | 220,000          | 10                             | 50   |
| CKR14BR224M_              | 2704                               | 2904    | 2104     | 2304      | 220,000          | 20                             | 50   |
| CKR14BR274K_              | 2705                               | 2905    | 2105     | 2305      | 270,000          | 10                             | 50   |
| <b>CKR15 (BX)</b>         |                                    |         |          |           |                  |                                |      |
| CKR15BX563K_              | 2706                               | 2906    | 2106     | 2306      | 56,000           | 10                             | 100  |
| CKR15BX683K_              | 2707                               | 2907    | 2107     | 2307      | 68,000           | 10                             | 100  |
| CKR15BX683M_              | 2708                               | 2908    | 2108     | 2308      | 68,000           | 20                             | 100  |
| CKR15BX823K_              | 2709                               | 2909    | 2109     | 2309      | 82,000           | 10                             | 100  |
| CKR15BX104K_              | 2710                               | 2910    | 2110     | 2310      | 100,000          | 10                             | 100  |
| CKR15BX104M_              | 2711                               | 2911    | 2111     | 2311      | 100,000          | 20                             | 100  |

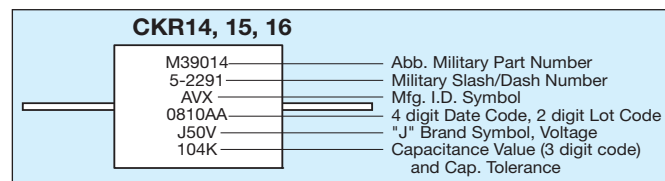
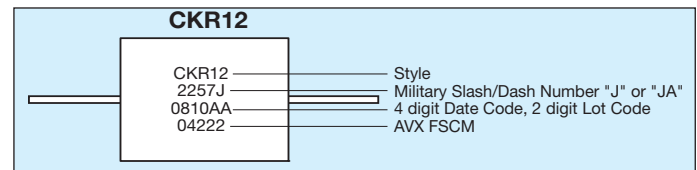
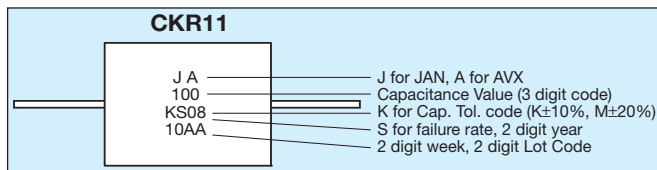
— Add appropriate failure rate level letter (M, P, R or S)

## MILITARY DASH NUMBER IDENTIFICATION CKR15/16 TO MIL-PRF-39014/05 (Dash Number From Table)

| Military Type Designation | Failure Rate Level (%/1,000 Hours) |         |          |           | Capacitance (pF) | Capacitance Tolerance ±Percent | WVDC |
|---------------------------|------------------------------------|---------|----------|-----------|------------------|--------------------------------|------|
|                           | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                                |      |
| <b>CKR15 (BR)</b>         |                                    |         |          |           |                  |                                |      |
| CKR15BR124K_              | 2712                               | 2912    | 2112     | 2312      | 120,000          | 10                             | 100  |
| CKR15BR154K_              | 2713                               | 2913    | 2113     | 2313      | 150,000          | 10                             | 100  |
| CKR15BR154M_              | 2714                               | 2914    | 2114     | 2314      | 150,000          | 20                             | 100  |
| CKR15BR184K_              | 2715                               | 2915    | 2115     | 2315      | 180,000          | 10                             | 100  |
| CKR15BR224K_              | 2716                               | 2916    | 2116     | 2316      | 220,000          | 10                             | 100  |
| CKR15BR224M_              | 2717                               | 2917    | 2117     | 2317      | 220,000          | 20                             | 100  |
| CKR15BR274K_              | 2718                               | 2918    | 2118     | 2318      | 270,000          | 10                             | 100  |
| CKR15BR334K_              | 2719                               | 2919    | 2119     | 2319      | 330,000          | 10                             | 100  |
| CKR15BR334M_              | 2720                               | 2920    | 2120     | 2320      | 330,000          | 20                             | 100  |
| CKR15BR474K_              | 2721                               | 2921    | 2121     | 2321      | 470,000          | 10                             | 50   |
| CKR15BR474M_              | 2722                               | 2922    | 2122     | 2322      | 470,000          | 20                             | 50   |
| CKR15BR684K_              | 2723                               | 2923    | 2123     | 2323      | 680,000          | 10                             | 50   |
| CKR15BR684M_              | 2724                               | 2924    | 2124     | 2324      | 680,000          | 20                             | 50   |
| CKR15BR105K_              | 2725                               | 2925    | 2125     | 2325      | 1,000,000        | 10                             | 50   |
| CKR15BR105M_              | 2726                               | 2926    | 2126     | 2326      | 1,000,000        | 20                             | 50   |
| <b>CKR16 (BR)</b>         |                                    |         |          |           |                  |                                |      |
| CKR16BR474K_              | 2727                               | 2927    | 2127     | 2327      | 470,000          | 10                             | 100  |
| CKR16BR474M_              | 2728                               | 2928    | 2128     | 2328      | 470,000          | 20                             | 100  |
| CKR16BR684K_              | 2729                               | 2929    | 2129     | 2329      | 680,000          | 10                             | 100  |
| CKR16BR684M_              | 2730                               | 2930    | 2130     | 2330      | 680,000          | 20                             | 100  |
| CKR16BR105K_              | 2731                               | 2931    | 2131     | 2331      | 1,000,000        | 10                             | 100  |
| CKR16BR105M_              | 2732                               | 2932    | 2132     | 2332      | 1,000,000        | 20                             | 100  |
| CKR16BR225K_              | 2733                               | 2933    | 2133     | 2333      | 2,200,000        | 10                             | 50   |
| CKR16BR225M_              | 2734                               | 2934    | 2134     | 2334      | 2,200,000        | 20                             | 50   |
| CKR16BR335K_              | 2735                               | 2935    | 2135     | 2335      | 3,300,000        | 10                             | 50   |
| CKR16BR335M_              | 2736                               | 2936    | 2136     | 2336      | 3,300,000        | 20                             | 50   |

— Add appropriate failure rate level letter (M, P, R or S)

## MARKING

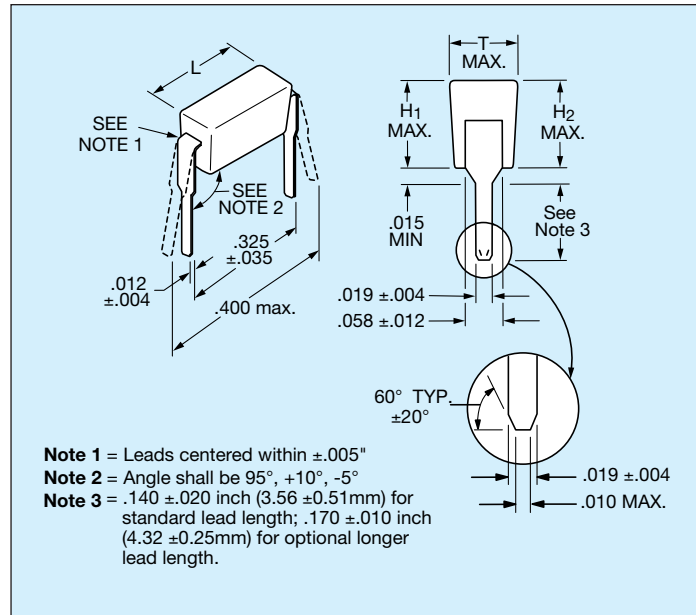


## CROSS REFERENCE CHART - AVX MILITARY FOR MOLDED AXIAL LEAD

| AVX Style | Per Mil-Spec |               |            | Case Size                 |                         |                        |
|-----------|--------------|---------------|------------|---------------------------|-------------------------|------------------------|
|           | MIL-C-11015  | MIL-PRF-39014 | MIL-PRF-20 | Length (L)                | Diameter (D)            | Lead Diameter (L.D.)   |
| MA10      | CK12         | CKR11         | CCR75/CC75 | 4.07 ±.25<br>(.160±.010)  | 2.29±.25<br>(.090±.010) | .48±.05<br>(.019±.002) |
| MA20      | CK13         | CKR12         | CCR76/CC76 | 6.35 ±.25<br>(.250 ±.010) | 2.29±.25<br>(.090±.010) | .48±.05<br>(.019±.002) |
| MA30      | —            | —             | —          | 6.10 ±.25<br>(.240±.010)  | 3.30±.25<br>(.130±.010) | .48±.05<br>(.019±.002) |
| MA40      | CK14         | CKR14         | CCR77/CC77 | 9.91±.25<br>(.390±.010)   | 3.56±.25<br>(.140±.010) | .63±.05<br>(.025±.002) |
| MA50      | CK15         | CKR15         | CCR78/CC78 | 12.7±.51<br>(.500±.020)   | 6.35±.38<br>(.250±.015) | .63±.05<br>(.025±.002) |
| MA60      | CK16         | CKR16         | CCR79/CC79 | 17.53±.51<br>(.690±.020)  | 8.89±.51<br>(.350±.015) | .63±.05<br>(.025±.002) |

Dimensions: Millimeters (Inches)





## HOW TO ORDER

**Military Type Designation: Styles CKR22, CKR23, CKR24**

**Dash Number Option: MIL-PRF-39014/22 (Add Appropriate Dash Number)**

### CKR22

#### Style

CK = General purpose, ceramic dielectric, fixed capacitors  
 R = Established Reliability parts  
 22 = Remaining two numbers identify shape and dimension

### BX

#### Voltage-Temperature Limits

First letter identifies temperature range.  
 B =  $-55^\circ\text{C}$  to  $+125^\circ\text{C}$   
 C =  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$   
 Second letter identifies voltage-temperature coefficient.

| Capacitance Change with Reference to 25°C |             |               |
|---|-------------|---------------|
| Second Letter                             | No Voltage  | Rated Voltage |
| G   | +30, -30ppm | +30, -30ppm   |
| H   | +60, -60ppm | +60, -60ppm   |
| R   | +15, -15%   | +15, -40%     |
| X   | +15, -15%   | +15, -25%     |

### 104

#### Capacitance

First two digits are the significant figures of capacitance. Third digit indicates the additional number of zeros. For example, order 100,000 pF as 104. (For values below 10pF use "R" in place of decimal point, e.g., 1R5 = 1.5pF)

### K

#### Capacitance Tolerance

D =  $\pm 5\text{pF}$   
 F =  $\pm 1\%$   
 J =  $\pm 5\%$   
 K =  $\pm 10\%$   
 M =  $\pm 20\%$

### R

#### Military Failure Rate

M = 1% per 1000 hours  
 P = 0.1% per 1000 hours  
 R = 0.01% per 1000 hours  
 S = 0.001% per 1000 hours

Note:  
 AVX reserves the right to substitute a lower failure rate part per MIL-PRF-39014. Substitutability for failure rate levels shall be as follows:

| Failure Rate Level | Will Replace Failure Rate Level |
|--------------------|---------------------------------|
| S (STD) (X-ray)    | R, P, M, L                      |
| R (STD) (No X-ray) | P, M, L                         |
| P                  | M, L                            |
| M                  | L                               |

## PACKAGING REQUIREMENTS

**Packaging:** 200 pcs/slide pack. See page 35.

## SIZE SPECIFICATIONS

Dimensions: Millimeters (Inches)

| MIL-PRF-39014 | Length (L)           | Height (H <sub>1</sub> ) | Height (H <sub>2</sub> ) | Thickness            |
|---------------|----------------------|--------------------------|--------------------------|----------------------|
| CKR22         | 6.60<br>(.260 ±.020) | 3.25<br>(.128 ±.007)     | 4.45 max.<br>(.175)      | 2.34<br>(.092 ±.006) |
| CKR23         | 6.60<br>(.260 ±.020) | 3.94<br>(.155 ±.007)     | 4.45 max.<br>(.175)      | 2.34<br>(.092 ±.006) |
| CKR24         | 6.60<br>(.260 ±.020) | 7.19<br>(.283 ±.007)     | 8.13 max.<br>(.320)      | 2.34<br>(.092 ±.006) |

## MILITARY DASH NUMBER IDENTIFICATION CKR22 TO MIL-PRF-39014/22 (Dash Number From Table)

| Military Type Designation  | Failure Rate Level (%/1,000 Hours) |         |          |           |                             |         |          |           | Capacitance (pF) | Capacitance Tolerance | WVDC            |                 |
|--|------------------------------------|---------|----------|-----------|-----------------------------|---------|----------|-----------|------------------|-----------------------|-----------------|-----------------|
|  | Standard Lead Length               |         |          |           | Optional Longer Lead Length |         |          |           |                  |                       |                 |                 |
|  | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) | 1.0 (M)                     | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                       |                 |                 |
| <b>Style CKR22, Voltage-temperature limits of 0 ± 60 ppm/°C.</b> |                                    |         |          |           |                             |         |          |           |                  |                       |                 |                 |
| CKR22CH1R0D_   | 0001                               | 0301    | 0601     | 0901      | 3001                        | 3301    | 3601     | 3901      | 1.0              | D                     | 200<br>↓<br>200 |                 |
| CKR22CH1R2D_   | 0004                               | 0304    | 0604     | 0904      | 3004                        | 3304    | 3604     | 3904      | 1.2              | D                     |                 |                 |
| CKR22CH1R5D_   | 0007                               | 0307    | 0607     | 0907      | 3007                        | 3307    | 3607     | 3907      | 1.5              | D                     |                 |                 |
| CKR22CH1R8D_   | 0010                               | 0310    | 0610     | 0910      | 3010                        | 3310    | 3610     | 3910      | 1.8              | D                     |                 |                 |
| CKR22CH2R2D_   | 0013                               | 0313    | 0613     | 0913      | 3013                        | 3313    | 3613     | 3913      | 2.2              | D                     |                 |                 |
| CKR22CH2R7D_   | 0016                               | 0316    | 0616     | 0916      | 3016                        | 3316    | 3616     | 3916      | 2.7              | D                     |                 |                 |
| CKR22CH3R3D_   | 0019                               | 0319    | 0619     | 0919      | 3019                        | 3319    | 3619     | 3919      | 3.3              | D                     |                 |                 |
| CKR22CH3R9D_   | 0022                               | 0322    | 0622     | 0922      | 3022                        | 3322    | 3622     | 3922      | 3.9              | D                     |                 |                 |
| CKR22CH4R7D_   | 0025                               | 0325    | 0625     | 0925      | 3025                        | 3325    | 3625     | 3925      | 4.7              | D                     |                 |                 |
| CKR22CH5R6D_   | 0028                               | 0328    | 0628     | 0928      | 3028                        | 3328    | 3628     | 3928      | 5.6              | D                     |                 |                 |
| CKR22CH6R8D_   | 0031                               | 0331    | 0631     | 0931      | 3031                        | 3331    | 3631     | 3931      | 6.8              | D                     |                 |                 |
| CKR22CH8R2D_   | 0034                               | 0334    | 0634     | 0934      | 3034                        | 3334    | 3634     | 3934      | 8.2              | D                     |                 |                 |
| CKR22CH100D_   | 0037                               | 0337    | 0637     | 0937      | 3037                        | 3337    | 3637     | 3937      | 10               | D                     |                 |                 |
| CKR22CH100J_   | 0038                               | 0338    | 0638     | 0938      | 3038                        | 3338    | 3638     | 3938      | 10               | J                     |                 |                 |
| CKR22CH100K_   | 0039                               | 0339    | 0639     | 0939      | 3039                        | 3339    | 3639     | 3939      | 10               | K                     |                 |                 |
| CKR22CH120D_   | 0040                               | 0340    | 0640     | 0940      | 3040                        | 3340    | 3640     | 3940      | 12               | D                     |                 |                 |
| CKR22CH120J_   | 0041                               | 0341    | 0641     | 0941      | 3041                        | 3341    | 3641     | 3941      | 12               | J                     |                 |                 |
| CKR22CH120K_   | 0042                               | 0342    | 0642     | 0942      | 3042                        | 3342    | 3642     | 3942      | 12               | K                     |                 |                 |
| CKR22CH150D_   | 0043                               | 0343    | 0643     | 0943      | 3043                        | 3343    | 3643     | 3943      | 15               | D                     |                 |                 |
| CKR22CH150J_   | 0044                               | 0344    | 0644     | 0944      | 3044                        | 3344    | 3644     | 3944      | 15               | J                     |                 |                 |
| CKR22CH150K_   | 0045                               | 0345    | 0645     | 0945      | 3045                        | 3345    | 3645     | 3945      | 15               | K                     |                 |                 |
| CKR22CH180D_   | 0046                               | 0346    | 0646     | 0946      | 3046                        | 3346    | 3646     | 3946      | 18               | D                     |                 |                 |
| CKR22CH180J_   | 0047                               | 0347    | 0647     | 0947      | 3047                        | 3347    | 3647     | 3947      | 18               | J                     |                 |                 |
| CKR22CH180K_   | 0048                               | 0348    | 0648     | 0948      | 3048                        | 3348    | 3648     | 3948      | 18               | K                     |                 |                 |
| <b>Style CKR22, Voltage-temperature limits of ±30 ppm/°C.</b>    |                                    |         |          |           |                             |         |          |           |                  |                       |                 |                 |
| CKR22CG220D_   | 0049                               | 0349    | 0649     | 0949      | 3049                        | 3349    | 3649     | 3949      | 22               | D                     |                 | 200<br>↓<br>200 |
| CKR22CG220J_   | 0050                               | 0350    | 0650     | 0950      | 3050                        | 3350    | 3650     | 3950      | 22               | J                     |                 |                 |
| CKR22CG220K_   | 0051                               | 0351    | 0651     | 0951      | 3051                        | 3351    | 3651     | 3951      | 22               | K                     |                 |                 |
| CKR22CG270D_   | 0052                               | 0352    | 0652     | 0952      | 3052                        | 3352    | 3652     | 3952      | 27               | D                     |                 |                 |
| CKR22CG270J_   | 0053                               | 0353    | 0653     | 0953      | 3053                        | 3353    | 3653     | 3953      | 27               | J                     |                 |                 |
| CKR22CG270K_   | 0054                               | 0354    | 0654     | 0954      | 3054                        | 3354    | 3654     | 3954      | 27               | K                     |                 |                 |
| CKR22CG330D_   | 0055                               | 0355    | 0655     | 0955      | 3055                        | 3355    | 3655     | 3955      | 33               | D                     |                 |                 |
| CKR22CG330J_   | 0056                               | 0356    | 0656     | 0956      | 3056                        | 3356    | 3656     | 3956      | 33               | J                     |                 |                 |
| CKR22CG330K_   | 0057                               | 0357    | 0657     | 0957      | 3057                        | 3357    | 3657     | 3957      | 33               | K                     |                 |                 |
| CKR22CG390D_   | 0058                               | 0358    | 0658     | 0958      | 3058                        | 3358    | 3658     | 3958      | 39               | D                     |                 |                 |
| CKR22CG390J_   | 0059                               | 0359    | 0659     | 0959      | 3059                        | 3359    | 3659     | 3959      | 39               | J                     |                 |                 |
| CKR22CG390K_   | 0060                               | 0360    | 0660     | 0960      | 3060                        | 3360    | 3660     | 3960      | 39               | K                     |                 |                 |
| CKR22CG470D_   | 0061                               | 0361    | 0661     | 0961      | 3061                        | 3361    | 3661     | 3961      | 47               | D                     |                 |                 |
| CKR22CG470J_   | 0062                               | 0362    | 0662     | 0962      | 3062                        | 3362    | 3662     | 3962      | 47               | J                     |                 |                 |
| CKR22CG470K_   | 0063                               | 0363    | 0663     | 0963      | 3063                        | 3363    | 3663     | 3963      | 47               | K                     |                 |                 |
| CKR22CG560D_   | 0064                               | 0364    | 0664     | 0964      | 3064                        | 3364    | 3664     | 3964      | 56               | D                     |                 |                 |
| CKR22CG560J_   | 0065                               | 0365    | 0665     | 0965      | 3065                        | 3365    | 3665     | 3965      | 56               | J                     |                 |                 |
| CKR22CG560K_   | 0066                               | 0366    | 0666     | 0966      | 3066                        | 3366    | 3666     | 3966      | 56               | K                     |                 |                 |
| CKR22CG680F_   | 0067                               | 0367    | 0667     | 0967      | 3067                        | 3367    | 3667     | 3967      | 68               | F                     |                 |                 |
| CKR22CG680J_   | 0068                               | 0368    | 0668     | 0968      | 3068                        | 3368    | 3668     | 3968      | 68               | J                     |                 |                 |
| CKR22CG680K_   | 0069                               | 0369    | 0669     | 0969      | 3069                        | 3369    | 3669     | 3969      | 68               | K                     |                 |                 |
| CKR22CG820F_   | 0070                               | 0370    | 0670     | 0970      | 3070                        | 3370    | 3670     | 3970      | 82               | F                     |                 |                 |
| CKR22CG820J_   | 0071                               | 0371    | 0671     | 0971      | 3071                        | 3371    | 3671     | 3971      | 82               | J                     |                 |                 |
| CKR22CG820K_   | 0072                               | 0372    | 0672     | 0972      | 3072                        | 3372    | 3672     | 3972      | 82               | K                     |                 |                 |
| CKR22CG101F_   | 0073                               | 0373    | 0673     | 0973      | 3073                        | 3373    | 3673     | 3973      | 100              | F                     |                 |                 |
| CKR22CG101J_   | 0074                               | 0374    | 0674     | 0974      | 3074                        | 3374    | 3674     | 3974      | 100              | J                     |                 |                 |
| CKR22CG101K_   | 0075                               | 0375    | 0675     | 0975      | 3075                        | 3375    | 3675     | 3975      | 100              | K                     |                 |                 |
| CKR22CG121F_   | 0076                               | 0376    | 0676     | 0976      | 3076                        | 3376    | 3676     | 3976      | 120              | F                     |                 |                 |
| CKR22CG121J_   | 0077                               | 0377    | 0677     | 0977      | 3077                        | 3377    | 3677     | 3977      | 120              | J                     |                 |                 |
| CKR22CG121K_   | 0078                               | 0378    | 0678     | 0978      | 3078                        | 3378    | 3678     | 3978      | 120              | K                     |                 |                 |
| CKR22CG151F_   | 0079                               | 0379    | 0679     | 0979      | 3079                        | 3379    | 3679     | 3979      | 150              | F                     |                 |                 |
| CKR22CG151J_   | 0080                               | 0380    | 0680     | 0980      | 3080                        | 3380    | 3680     | 3980      | 150              | J                     |                 |                 |
| CKR22CG151K_   | 0081                               | 0381    | 0681     | 0981      | 3081                        | 3381    | 3681     | 3981      | 150              | K                     |                 |                 |
| CKR22CG181F_   | 0082                               | 0382    | 0682     | 0982      | 3082                        | 3382    | 3682     | 3982      | 180              | F                     |                 |                 |
| CKR22CG181J_   | 0083                               | 0383    | 0683     | 0983      | 3083                        | 3383    | 3683     | 3983      | 180              | J                     |                 |                 |
| CKR22CG181K_   | 0084                               | 0384    | 0684     | 0984      | 3084                        | 3384    | 3684     | 3984      | 180              | K                     |                 |                 |
| CKR22CG221F_   | 0085                               | 0385    | 0685     | 0985      | 3085                        | 3385    | 3685     | 3985      | 220              | F                     |                 |                 |
| CKR22CG221J_   | 0086                               | 0386    | 0686     | 0986      | 3086                        | 3386    | 3686     | 3986      | 220              | J                     |                 |                 |
| CKR22CG221K_   | 0087                               | 0387    | 0687     | 0987      | 3087                        | 3387    | 3687     | 3987      | 220              | K                     |                 |                 |
| CKR22CG271F_   | 0088                               | 0388    | 0688     | 0988      | 3088                        | 3388    | 3688     | 3988      | 270              | F                     |                 |                 |
| CKR22CG271J_   | 0089                               | 0389    | 0689     | 0989      | 3089                        | 3389    | 3689     | 3989      | 270              | J                     |                 |                 |

— Add appropriate failure rate level letter (M, P, R or S)



## MILITARY DASH NUMBER IDENTIFICATION CKR22 TO MIL-PRF-39014/22 (Dash Number From Table)

| Military Type Designation   | Failure Rate Level (%/1,000 Hours) |         |          |           |                             |         |          |           | Capacitance (pF) | Capacitance Tolerance | WVDC |
|---|------------------------------------|---------|----------|-----------|-----------------------------|---------|----------|-----------|------------------|-----------------------|------|
|   | Standard Lead Length               |         |          |           | Optional Longer Lead Length |         |          |           |                  |                       |      |
|   | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) | 1.0 (M)                     | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                       |      |
| <b>Style CKR22, Voltage-temperature limits of ±15% (+15%, -25% for Rated Voltage)</b> |                                    |         |          |           |                             |         |          |           |                  |                       |      |
| CKR22BX271K_  | 0148                               | 0448    | 0748     | 1048      | 3148                        | 3448    | 3748     | 4048      | 270              | K                     | 200  |
| CKR22BX331K_  | 0149                               | 0449    | 0749     | 1049      | 3149                        | 3449    | 3749     | 4049      | 330              | K                     |      |
| CKR22BX331M_  | 0150                               | 0450    | 0750     | 1050      | 3150                        | 3450    | 3750     | 4050      | 330              | M                     | 200  |
| CKR22BX391K_  | 0151                               | 0451    | 0751     | 1051      | 3151                        | 3451    | 3751     | 4051      | 390              | K                     |      |
| CKR22BX471K_  | 0152                               | 0452    | 0752     | 1052      | 3152                        | 3452    | 3752     | 4052      | 470              | K                     | 200  |
| CKR22BX471M_  | 0153                               | 0453    | 0753     | 1053      | 3153                        | 3453    | 3753     | 4053      | 470              | M                     |      |
| CKR22BX561K_  | 0154                               | 0454    | 0754     | 1054      | 3154                        | 3454    | 3754     | 4054      | 560              | K                     | 200  |
| CKR22BX681K_  | 0155                               | 0455    | 0755     | 1055      | 3155                        | 3455    | 3755     | 4055      | 680              | K                     |      |
| CKR22BX681M_  | 0156                               | 0456    | 0756     | 1056      | 3156                        | 3456    | 3756     | 4056      | 680              | M                     | 100  |
| CKR22BX821K_  | 0157                               | 0457    | 0757     | 1057      | 3157                        | 3457    | 3757     | 4057      | 820              | K                     |      |
| CKR22BX102K_  | 0158                               | 0458    | 0758     | 1058      | 3158                        | 3458    | 3758     | 4058      | 1,000            | K                     | 100  |
| CKR22BX102M_  | 0159                               | 0459    | 0759     | 1059      | 3159                        | 3459    | 3759     | 4059      | 1,000            | M                     |      |
| CKR22BX122K_  | 0160                               | 0460    | 0760     | 1060      | 3160                        | 3460    | 3760     | 4060      | 1,200            | K                     | 100  |
| CKR22BX152K_  | 0161                               | 0461    | 0761     | 1061      | 3161                        | 3461    | 3761     | 4061      | 1,500            | K                     |      |
| CKR22BX152M_  | 0162                               | 0462    | 0762     | 1062      | 3162                        | 3462    | 3762     | 4062      | 1,500            | M                     | 100  |
| CKR22BX182K_  | 0163                               | 0463    | 0763     | 1063      | 3163                        | 3463    | 3763     | 4063      | 1,800            | K                     |      |
| CKR22BX222K_  | 0164                               | 0464    | 0764     | 1064      | 3164                        | 3464    | 3764     | 4064      | 2,200            | K                     | 100  |
| CKR22BX222M_  | 0165                               | 0465    | 0765     | 1065      | 3165                        | 3465    | 3765     | 4065      | 2,200            | M                     |      |
| CKR22BX272K_  | 0166                               | 0466    | 0766     | 1066      | 3166                        | 3466    | 3766     | 4066      | 2,700            | K                     | 100  |
| CKR22BX332K_  | 0167                               | 0467    | 0767     | 1067      | 3167                        | 3467    | 3767     | 4067      | 3,300            | K                     |      |
| CKR22BX332M_  | 0168                               | 0468    | 0768     | 1068      | 3168                        | 3468    | 3768     | 4068      | 3,300            | M                     | 100  |
| CKR22BX392K_  | 0169                               | 0469    | 0769     | 1069      | 3169                        | 3469    | 3769     | 4069      | 3,900            | K                     |      |
| CKR22BX472K_  | 0170                               | 0470    | 0770     | 1070      | 3170                        | 3470    | 3770     | 4070      | 4,700            | K                     | 100  |
| CKR22BX472M_  | 0171                               | 0471    | 0771     | 1071      | 3171                        | 3471    | 3771     | 4071      | 4,700            | M                     |      |
| CKR22BX562K_  | 0172                               | 0472    | 0772     | 1072      | 3172                        | 3472    | 3772     | 4072      | 5,600            | K                     | 100  |
| CKR22BX682K_  | 0173                               | 0473    | 0773     | 1073      | 3173                        | 3473    | 3773     | 4073      | 6,800            | K                     |      |
| CKR22BX682M_  | 0174                               | 0474    | 0774     | 1074      | 3174                        | 3474    | 3774     | 4074      | 6,800            | M                     | 100  |
| CKR22BX822K_  | 0175                               | 0475    | 0775     | 1075      | 3175                        | 3475    | 3775     | 4075      | 8,200            | K                     |      |
| CKR22BX103K_  | 0176                               | 0476    | 0776     | 1076      | 3176                        | 3476    | 3776     | 4076      | 10,000           | K                     | 50   |
| CKR22BX103M_  | 0177                               | 0477    | 0777     | 1077      | 3177                        | 3477    | 3777     | 4077      | 10,000           | M                     |      |
| CKR22BX123K_  | 0178                               | 0478    | 0778     | 1078      | 3178                        | 3478    | 3778     | 4078      | 12,000           | K                     | 50   |
| CKR22BX153K_  | 0179                               | 0479    | 0779     | 1079      | 3179                        | 3479    | 3779     | 4079      | 15,000           | K                     |      |
| CKR22BX153M_  | 0180                               | 0480    | 0780     | 1080      | 3180                        | 3480    | 3780     | 4080      | 15,000           | M                     | 50   |
| CKR22BX183K_  | 0181                               | 0481    | 0781     | 1081      | 3181                        | 3481    | 3781     | 4081      | 18,000           | K                     |      |
| CKR22BX223K_  | 0182                               | 0482    | 0782     | 1082      | 3182                        | 3482    | 3782     | 4082      | 22,000           | K                     | 50   |
| CKR22BX223M_  | 0183                               | 0483    | 0783     | 1083      | 3183                        | 3483    | 3783     | 4083      | 22,000           | M                     |      |
| CKR22BX273K_  | 0184                               | 0484    | 0784     | 1084      | 3184                        | 3484    | 3784     | 4084      | 27,000           | K                     | 50   |
| CKR22BX333K_  | 0185                               | 0485    | 0785     | 1085      | 3185                        | 3485    | 3785     | 4085      | 33,000           | K                     |      |
| CKR22BX333M_  | 0186                               | 0486    | 0786     | 1086      | 3186                        | 3486    | 3786     | 4086      | 33,000           | M                     | 50   |
| CKR22BX393K_  | 0187                               | 0487    | 0787     | 1087      | 3187                        | 3487    | 3787     | 4087      | 39,000           | K                     |      |
| CKR22BX473K_  | 0188                               | 0488    | 0788     | 1088      | 3188                        | 3488    | 3788     | 4088      | 47,000           | K                     | 50   |
| CKR22BX473M_  | 0189                               | 0489    | 0789     | 1089      | 3189                        | 3489    | 3789     | 4089      | 47,000           | M                     |      |
| CKR22BX563K_  | 0190                               | 0490    | 0790     | 1090      | 3190                        | 3490    | 3790     | 4090      | 56,000           | K                     | 50   |
| CKR22BX683K_  | 0191                               | 0491    | 0791     | 1091      | 3191                        | 3491    | 3791     | 4091      | 68,000           | K                     |      |
| CKR22BX683M_  | 0192                               | 0492    | 0792     | 1092      | 3192                        | 3492    | 3792     | 4092      | 68,000           | M                     | 50   |
| CKR22BX823K_  | 0193                               | 0493    | 0793     | 1093      | 3193                        | 3493    | 3793     | 4093      | 82,000           | K                     |      |
| CKR22BX104K_  | 0194                               | 0494    | 0794     | 1094      | 3194                        | 3494    | 3794     | 4094      | 100,000          | K                     | 50   |
| CKR22BX104M_  | 0195                               | 0495    | 0795     | 1095      | 3195                        | 3495    | 3795     | 4095      | 100,000          | M                     |      |

— Add appropriate failure rate level letter (M, P, R or S)

## MILITARY DASH NUMBER IDENTIFICATION CKR23 TO MIL-PRF-39014/22 (Dash Number From Table)

| Military Type Designation   | Failure Rate Level (%/1,000 Hours) |         |          |           |                             |         |          |           | Capacitance (pF) | Capacitance Tolerance | WVDC |
|---|------------------------------------|---------|----------|-----------|-----------------------------|---------|----------|-----------|------------------|-----------------------|------|
|   | Standard Lead Length               |         |          |           | Optional Longer Lead Length |         |          |           |                  |                       |      |
|   | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) | 1.0 (M)                     | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                       |      |
| <b>Style CKR23, Voltage-temperature limits of 0 ± 60 ppm/°C</b>                       |                                    |         |          |           |                             |         |          |           |                  |                       |      |
| CKR23CG561F   | 0258                               | 0558    | 0858     | 1158      | 3258                        | 3558    | 3858     | 4158      | 560              | F                     | 200  |
| CKR23CG561J   | 0259                               | 0559    | 0859     | 1159      | 3259                        | 3559    | 3859     | 4159      | 560              | J                     |      |
| CKR23CG561K   | 0260                               | 0560    | 0860     | 1160      | 3260                        | 3560    | 3860     | 4160      | 560              | K                     |      |
| CKR23CG681F   | 0261                               | 0561    | 0861     | 1161      | 3261                        | 3561    | 3861     | 4161      | 680              | F                     |      |
| CKR23CG681J   | 0262                               | 0562    | 0862     | 1162      | 3262                        | 3562    | 3862     | 4162      | 680              | J                     |      |
| CKR23CG681K   | 0263                               | 0563    | 0863     | 1163      | 3263                        | 3563    | 3863     | 4163      | 680              | K                     |      |
| CKR23CG821F   | 0264                               | 0564    | 0864     | 1164      | 3264                        | 3564    | 3864     | 4164      | 820              | F                     |      |
| CKR23CG821J   | 0265                               | 0565    | 0865     | 1165      | 3265                        | 3565    | 3865     | 4165      | 820              | J                     |      |
| CKR23CG821K   | 0266                               | 0566    | 0866     | 1166      | 3266                        | 3566    | 3866     | 4166      | 820              | K                     |      |
| CKR23CG102F   | 0267                               | 0567    | 0867     | 1167      | 3267                        | 3567    | 3867     | 4167      | 1,000            | F                     |      |
| CKR23CG102J   | 0268                               | 0568    | 0868     | 1168      | 3268                        | 3568    | 3868     | 4168      | 1,000            | J                     |      |
| CKR23CG102K   | 0269                               | 0569    | 0869     | 1169      | 3269                        | 3569    | 3869     | 4169      | 1,000            | K                     |      |
| CKR23CG122F   | 0270                               | 0570    | 0870     | 1170      | 3270                        | 3570    | 3870     | 4170      | 1,200            | F                     |      |
| CKR23CG122J   | 0271                               | 0571    | 0871     | 1171      | 3271                        | 3571    | 3871     | 4171      | 1,200            | J                     |      |
| CKR23CG122K   | 0272                               | 0572    | 0872     | 1172      | 3272                        | 3572    | 3872     | 4172      | 1,200            | K                     |      |
| CKR23CG272F   | 0273                               | 0573    | 0873     | 1173      | 3273                        | 3573    | 3873     | 4173      | 2,700            | F                     |      |
| CKR23CG272J   | 0274                               | 0574    | 0874     | 1174      | 3274                        | 3574    | 3874     | 4174      | 2,700            | J                     |      |
| CKR23CG272K   | 0275                               | 0575    | 0875     | 1175      | 3275                        | 3575    | 3875     | 4175      | 2,700            | K                     |      |
| CKR23CG332F   | 0276                               | 0576    | 0876     | 1176      | 3276                        | 3576    | 3876     | 4176      | 3,300            | F                     |      |
| CKR23CG332J   | 0277                               | 0577    | 0877     | 1177      | 3277                        | 3577    | 3877     | 4177      | 3,300            | J                     |      |
| CKR23CG332K   | 0278                               | 0578    | 0878     | 1178      | 3278                        | 3578    | 3878     | 4178      | 3,300            | K                     |      |
| CKR23CG472F   | 0279                               | 0579    | 0879     | 1179      | 3279                        | 3579    | 3879     | 4179      | 4,700            | F                     |      |
| CKR23CG472J   | 0280                               | 0580    | 0880     | 1180      | 3280                        | 3580    | 3880     | 4180      | 4,700            | J                     |      |
| CKR23CG472K   | 0281                               | 0581    | 0881     | 1181      | 3281                        | 3581    | 3881     | 4181      | 4,700            | K                     |      |
| CKR23CG562F   | 0282                               | 0582    | 0882     | 1182      | 3282                        | 3582    | 3882     | 4182      | 5,600            | F                     |      |
| CKR23CG562J   | 0283                               | 0583    | 0883     | 1183      | 3283                        | 3583    | 3883     | 4183      | 5,600            | J                     |      |
| CKR23CG562K   | 0284                               | 0584    | 0884     | 1184      | 3284                        | 3584    | 3884     | 4184      | 5,600            | K                     |      |
| CKR23CG682F   | 0285                               | 0585    | 0885     | 1185      | 3285                        | 3585    | 3885     | 4185      | 6,800            | F                     |      |
| CKR23CG682J   | 0286                               | 0586    | 0886     | 1186      | 3286                        | 3586    | 3886     | 4186      | 6,800            | J                     |      |
| CKR23CG682K   | 0287                               | 0587    | 0887     | 1187      | 3287                        | 3587    | 3887     | 4187      | 6,800            | K                     |      |
| CKR23CG822F   | 0288                               | 0588    | 0888     | 1188      | 3288                        | 3588    | 3888     | 4188      | 8,200            | F                     |      |
| CKR23CG822J   | 0289                               | 0589    | 0889     | 1189      | 3289                        | 3589    | 3889     | 4189      | 8,200            | J                     |      |
| CKR23CG822K   | 0290                               | 0590    | 0890     | 1190      | 3290                        | 3590    | 3890     | 4190      | 8,200            | K                     |      |
| CKR23CG103F   | 0291                               | 0591    | 0891     | 1191      | 3291                        | 3591    | 3891     | 4191      | 10,000           | F                     |      |
| CKR23CG103J   | 0292                               | 0592    | 0892     | 1192      | 3292                        | 3592    | 3892     | 4192      | 10,000           | J                     |      |
| CKR23CG103K   | 0293                               | 0593    | 0893     | 1193      | 3293                        | 3593    | 3893     | 4193      | 10,000           | K                     |      |
| <b>Style CKR23, voltage-temperature limits of ±15% (+15%, -25% for Rated Voltage)</b> |                                    |         |          |           |                             |         |          |           |                  |                       |      |
| CKR23BX102K   | 0196                               | 0496    | 0796     | 1096      | 3196                        | 3496    | 3796     | 4096      | 1,000            | K                     | 200  |
| CKR23BX102M   | 0197                               | 0497    | 0797     | 1097      | 3197                        | 3497    | 3797     | 4097      | 1,000            | M                     |      |
| CKR23BX122K   | 0198                               | 0498    | 0798     | 1098      | 3198                        | 3498    | 3798     | 4098      | 1,200            | K                     |      |
| CKR23BX152K   | 0199                               | 0499    | 0799     | 1099      | 3199                        | 3499    | 3799     | 4099      | 1,500            | K                     |      |
| CKR23BX152M   | 0200                               | 0500    | 0800     | 1100      | 3200                        | 3500    | 3800     | 4100      | 1,500            | M                     |      |
| CKR23BX182K   | 0201                               | 0501    | 0801     | 1101      | 3201                        | 3501    | 3801     | 4101      | 1,800            | K                     |      |
| CKR23BX222K   | 0202                               | 0502    | 0802     | 1102      | 3202                        | 3502    | 3802     | 4102      | 2,200            | K                     |      |
| CKR23BX222M   | 0203                               | 0503    | 0803     | 1103      | 3203                        | 3503    | 3803     | 4103      | 2,200            | M                     |      |
| CKR23BX272K   | 0204                               | 0504    | 0804     | 1104      | 3204                        | 3504    | 3804     | 4104      | 2,700            | K                     |      |
| CKR23BX332K   | 0205                               | 0505    | 0805     | 1105      | 3205                        | 3505    | 3805     | 4105      | 3,300            | K                     |      |
| CKR23BX332M   | 0206                               | 0506    | 0806     | 1106      | 3206                        | 3506    | 3806     | 4106      | 3,300            | M                     |      |
| CKR23BX392K   | 0207                               | 0507    | 0807     | 1107      | 3207                        | 3507    | 3807     | 4107      | 3,900            | K                     |      |
| CKR23BX472K   | 0208                               | 0508    | 0808     | 1108      | 3208                        | 3508    | 3808     | 4108      | 4,700            | K                     |      |
| CKR23BX472M   | 0209                               | 0509    | 0809     | 1109      | 3209                        | 3509    | 3809     | 4109      | 4,700            | M                     |      |
| CKR23BX562K   | 0210                               | 0510    | 0810     | 1110      | 3210                        | 3510    | 3810     | 4110      | 5,600            | K                     |      |
| CKR23BX682K   | 0211                               | 0511    | 0811     | 1111      | 3211                        | 3511    | 3811     | 4111      | 6,800            | K                     |      |
| CKR23BX682M   | 0212                               | 0512    | 0812     | 1112      | 3212                        | 3512    | 3812     | 4112      | 6,800            | M                     |      |
| CKR23BX822K   | 0213                               | 0513    | 0813     | 1113      | 3213                        | 3513    | 3813     | 4113      | 8,200            | K                     |      |
| CKR23BX103K   | 0214                               | 0514    | 0814     | 1114      | 3214                        | 3514    | 3814     | 4114      | 10,000           | K                     |      |
| CKR23BX103M   | 0215                               | 0515    | 0815     | 1115      | 3215                        | 3515    | 3815     | 4115      | 10,000           | M                     |      |
| CKR23BX123K   | 0216                               | 0516    | 0816     | 1116      | 3216                        | 3516    | 3816     | 4116      | 12,000           | K                     |      |
| CKR23BX153K   | 0217                               | 0517    | 0817     | 1117      | 3217                        | 3517    | 3817     | 4117      | 15,000           | K                     |      |
| CKR23BX153M   | 0218                               | 0518    | 0818     | 1118      | 3218                        | 3518    | 3818     | 4118      | 15,000           | M                     |      |
| CKR23BX183K   | 0219                               | 0519    | 0819     | 1119      | 3219                        | 3519    | 3819     | 4119      | 18,000           | K                     |      |
| CKR23BX223K   | 0220                               | 0520    | 0820     | 1120      | 3220                        | 3520    | 3820     | 4120      | 22,000           | K                     |      |
| CKR23BX223M   | 0221                               | 0521    | 0821     | 1121      | 3221                        | 3521    | 3821     | 4121      | 22,000           | M                     |      |
| CKR23BX273K   | 0222                               | 0522    | 0822     | 1122      | 3222                        | 3522    | 3822     | 4122      | 27,000           | K                     |      |
| CKR23BX333K   | 0223                               | 0523    | 0823     | 1123      | 3223                        | 3523    | 3823     | 4123      | 33,000           | K                     |      |
| CKR23BX333M   | 0224                               | 0524    | 0824     | 1124      | 3224                        | 3524    | 3824     | 4124      | 33,000           | M                     |      |
| CKR23BX393K   | 0225                               | 0525    | 0825     | 1125      | 3225                        | 3525    | 3825     | 4125      | 39,000           | K                     |      |
| CKR23BX473K   | 0226                               | 0526    | 0826     | 1126      | 3226                        | 3526    | 3826     | 4126      | 47,000           | K                     |      |
| CKR23BX473M   | 0227                               | 0527    | 0827     | 1127      | 3227                        | 3527    | 3827     | 4127      | 47,000           | M                     |      |
| CKR23BX563K   | 0228                               | 0528    | 0828     | 1128      | 3228                        | 3528    | 3828     | 4128      | 56,000           | K                     |      |
| CKR23BX683K   | 0229                               | 0529    | 0829     | 1129      | 3229                        | 3529    | 3829     | 4129      | 68,000           | K                     |      |
| CKR23BX683M   | 0230                               | 0530    | 0830     | 1130      | 3230                        | 3530    | 3830     | 4130      | 68,000           | M                     |      |
| CKR23BX823K   | 0231                               | 0531    | 0831     | 1131      | 3231                        | 3531    | 3831     | 4131      | 82,000           | K                     |      |
| CKR23BX104K   | 0232                               | 0532    | 0832     | 1132      | 3232                        | 3532    | 3832     | 4132      | 100,000          | K                     |      |
| CKR23BX104M   | 0233                               | 0533    | 0833     | 1133      | 3233                        | 3533    | 3833     | 4133      | 100,000          | M                     |      |
| CKR23BX124K   | 0234                               | 0534    | 0834     | 1134      | 3234                        | 3534    | 3834     | 4134      | 120,000          | K                     |      |
| CKR23BX154K   | 0235                               | 0535    | 0835     | 1135      | 3235                        | 3535    | 3835     | 4135      | 150,000          | K                     |      |
| CKR23BX154M   | 0236                               | 0536    | 0836     | 1136      | 3236                        | 3536    | 3836     | 4136      | 150,000          | M                     |      |
| CKR23BX184K   | 0237                               | 0537    | 0837     | 1137      | 3237                        | 3537    | 3837     | 4137      | 180,000          | K                     |      |
| CKR23BX224K   | 0238                               | 0538    | 0838     | 1138      | 3238                        | 3538    | 3838     | 4138      | 220,000          | K                     |      |
| CKR23BX224M   | 0239                               | 0539    | 0839     | 1139      | 3239                        | 3539    | 3839     | 4139      | 220,000          | M                     |      |

— Add appropriate failure rate level letter (M, P, R or S)

## MILITARY DASH NUMBER IDENTIFICATION CKR24 TO MIL-PRF-39014/22 (Dash Number From Table)

| Military Type Designation  | Failure Rate Level (%/1,000 Hours) |         |          |           |                             |         |          |           | Capacitance (pF) | Capacitance Tolerance | WVDC    |
|--|------------------------------------|---------|----------|-----------|-----------------------------|---------|----------|-----------|------------------|-----------------------|---------|
|  | Standard Lead Length               |         |          |           | Optional Longer Lead Length |         |          |           |                  |                       |         |
|  | 1.0 (M)                            | 0.1 (P) | 0.01 (R) | 0.001 (S) | 1.0 (M)                     | 0.1 (P) | 0.01 (R) | 0.001 (S) |                  |                       |         |
| Style CKR24, Voltage-temperature limits of $\pm 15\%$ (+15%, -40% for Rated Voltage) |                                    |         |          |           |                             |         |          |           |                  |                       |         |
| CKR24BR124K_   | 0240                               | 0540    | 0840     | 1140      | 3240                        | 3540    | 3840     | 4140      | 120,000          | K                     | 100     |
| CKR24BR154K_   | 0241                               | 0541    | 0841     | 1141      | 3241                        | 3541    | 3841     | 4141      | 150,000          | K                     | 100     |
| CKR24BR154M_   | 0242                               | 0542    | 0842     | 1142      | 3242                        | 3542    | 3842     | 4142      | 150,000          | M                     | 100     |
| CKR24BR184K_   | 0243                               | 0543    | 0843     | 1143      | 3243                        | 3543    | 3843     | 4143      | 180,000          | K                     | 50      |
| CKR24BR224K_   | 0244                               | 0544    | 0844     | 1144      | 3244                        | 3544    | 3844     | 4144      | 220,000          | K                     | ↓<br>50 |
| CKR24BR224M_   | 0245                               | 0545    | 0845     | 1145      | 3245                        | 3545    | 3845     | 4145      | 220,000          | M                     |         |
| CKR24BR274K_   | 0246                               | 0546    | 0846     | 1146      | 3246                        | 3546    | 3846     | 4146      | 270,000          | K                     |         |
| CKR24BR334K_   | 0247                               | 0547    | 0847     | 1147      | 3247                        | 3547    | 3847     | 4147      | 330,000          | K                     |         |
| CKR24BR334M_   | 0248                               | 0548    | 0848     | 1148      | 3248                        | 3548    | 3848     | 4148      | 330,000          | M                     |         |
| CKR24BR394K_   | 0249                               | 0549    | 0849     | 1149      | 3249                        | 3549    | 3849     | 4149      | 390,000          | K                     |         |
| CKR24BR474K_   | 0250                               | 0550    | 0850     | 1150      | 3250                        | 3550    | 3850     | 4150      | 470,000          | K                     |         |
| CKR24BR474M_   | 0251                               | 0551    | 0851     | 1151      | 3251                        | 3551    | 3851     | 4151      | 470,000          | M                     |         |
| CKR24BR564K_   | 0252                               | 0552    | 0852     | 1152      | 3252                        | 3552    | 3852     | 4152      | 560,000          | K                     |         |
| CKR24BR684K_   | 0253                               | 0553    | 0853     | 1153      | 3253                        | 3553    | 3853     | 4153      | 680,000          | K                     |         |
| CKR24BR684M_   | 0254                               | 0554    | 0854     | 1154      | 3254                        | 3554    | 3854     | 4154      | 680,000          | M                     |         |
| CKR24BR824K_   | 0255                               | 0555    | 0855     | 1155      | 3255                        | 3555    | 3855     | 4155      | 820,000          | K                     |         |
| CKR24BR105K_   | 0256                               | 0556    | 0856     | 1156      | 3256                        | 3556    | 3856     | 4156      | 1,000,000        | K                     |         |
| CKR24BR105M_   | 0257                               | 0557    | 0857     | 1157      | 3257                        | 3557    | 3857     | 4157      | 1,000,000        | M                     |         |

└── Add appropriate failure rate level letter (M, P, R or S)

## MARKING

