

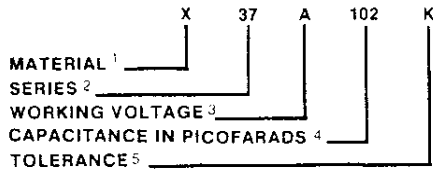
X37 SERIES — X7R DIELECTRIC

OPERATING TEMPERATURE RANGE —55° C to +175° C

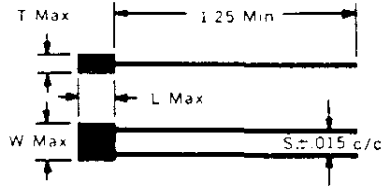
HI-TEMP CERAMIC CAPACITORS

RECTANGULAR — PRECISION EPOXY CASE — RADIAL LEADS

PART NUMBER AND ORDERING INFORMATION



- MATERIAL:** X - X7R
- SERIES:** 37 = 175° C
Rectangular - Radial Leads
- WORKING VOLTAGE DC:**
A 100 VDC
C 50 VDC
D 25 VDC
- CAPACITANCE IN PICO FARADS:**
102 = 1000 pF
First two digits are significant,
last digit signifies number of zeros.
- TOLERANCE:**
D = ±0.5 pF (1 pF to 10 pF)
J = ±5% (10 pF and above)
K = ±10% (5.6 pF and above)
M = ±20% (2.7 pF and above)



LEAD MATERIAL:
0.25" dia Nickel per MIL-STD-1276 N-1
WELDABLE AND SOLDERABLE

SPECIFICATIONS

- WORKING VOLTAGE:** 25, 50, 100 VDC @ 175° C
50, 100, 200 VDC @ 125° C
- TEMPERATURE COEFFICIENT:** X7R - 15% Change
-55° C through +125° C
See Figure 2.
- DISSIPATION FACTOR:** 2.5% Max @ 1kHz, 1 VRMS 25° C
See Figure 4.
- INSULATION RESISTANCE:** 100,000 Megohms or 1000 Megohms-Microfarads, whichever is less at 25° C and Rated Voltage, 5000 Megohms or 5 Megohm-Microfarads, whichever is less at 175° C and Rated Voltage. See Figure 5.
- DIELECTRIC STRENGTH:** 250% Rated Voltage for 5 : 1 Second with 100 MA maximum charging current
- OPERATING TEMPERATURE RANGE:** -55° C through +175° C
- LIFE TEST:** In excess of 250 hours at Rated Voltage at 175° C
- MARKING:** As size permits, the following markings will be used (listed in order of preference):
Capacitance
Mfg. Identification
Tolerance
Voltage
Lot Code

CAP	50 VDC				100 VDC				200 VDC			
	L	W	T	S	L	W	T	S	L	W	T	S
5.6 pF	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
6.8	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
8.2	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
10	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
12	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
15	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
18	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
22	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
27	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
33	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
39	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
47	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
56	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
68	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
82	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
100	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
120	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
150	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
180	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
220	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
270	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
330	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
390	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
470	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
560	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
680	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
820	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
1000	.2	.2	.1	.2	.2	.2	.1	.2	.2	.2	.1	.2
1200	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
1500	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
1800	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
2200	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
2700	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
3300	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
3900	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
4700	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
5600	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
6800	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
8200	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2
.010 Mfd	.2	.2	.1	.2	.2	.2	.1	.2	.3	.3	.1	.2

CAP	50 VDC				100 VDC				200 VDC			
	L	W	T	S	L	W	T	S	L	W	T	S
.012 Mfd	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.015	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.018	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.022	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.025	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.027	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.033	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.039	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.047	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.050	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.056	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.068	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.082	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.10	.2	.2	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.12	.3	.3	.1	.2	.3	.3	.1	.2	.3	.3	.1	.2
.15	.3	.3	.1	.2	.3	.3	.1	.2				
.18	.3	.3	.1	.2	.3	.3	.1	.2				
.22	.3	.3	.1	.2	.3	.3	.1	.2				
.25	.3	.3	.1	.2	.3	.3	.1	.2				
.27	.3	.3	.1	.2	.3	.3	.1	.2				
.33	.3	.3	.1	.2	.5	.5	.1	.4				
.39	.3	.3	.1	.2	.5	.5	.1	.4				
.47	.3	.3	.1	.2	.5	.5	.1	.4				
.50	.3	.3	.1	.2	.5	.5	.1	.4				
.56	.3	.3	.1	.2	.5	.5	.1	.4				
.68	.3	.3	.1	.2	.5	.5	.1	.4				
.82	.3	.3	.1	.2	.5	.5	.1	.4				
1.0	.3	.3	.1	.2	.5	.5	.1	.4				
1.5	.5	.5	.2	.4	.5	.5	.2	.4				
2.0	.5	.5	.2	.4	.5	.5	.2	.4				
2.5	.5	.5	.2	.4	.5	.5	.3	.4				
3.0	.5	.5	.3	.4	.4	.7	.3	.6				
4.0	.5	.5	.3	.4	.4	.7	.4	.6				
5.0	.4	.7	.3	.6	.4	.7	.5	.6				
6.0	.4	.7	.5	.6	.4	.7	.7	.6				
8.0	.4	.7	.7	.6	.4	.7	.8	.6				
10.0	.4	.7	.8	.6	.4	.7	1.0	.6				