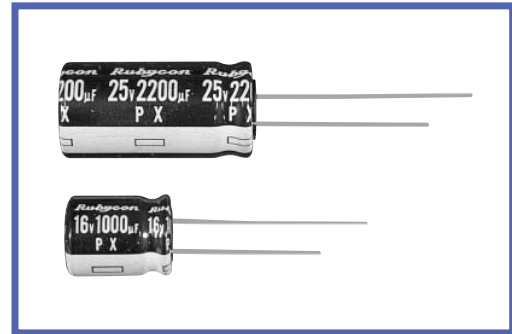


PX SERIES

105°C Miniaturized

◆FEATURES

- RoHS compliance.



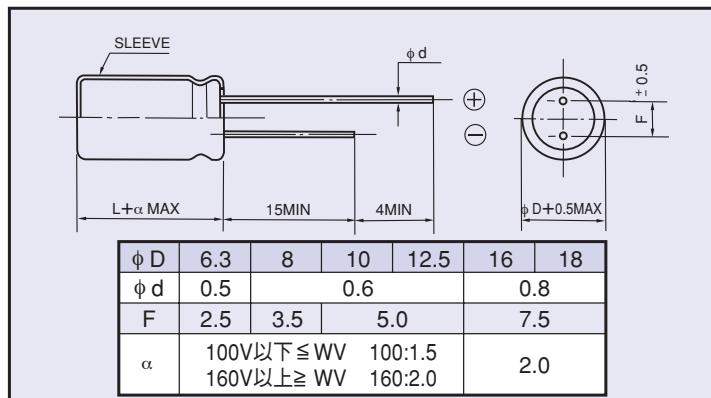
◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------|------|------|------|------|------|------|------|------|------|-----------|---------------|----------------|------|
| Category Temperature Range | -55~+105°C | -40~+105°C | -25~+105°C | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3~100V.DC | 160~400V.DC | 450V.DC | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | 6.3~100V.DC | | 160~450V.DC | | | | | | | | | | | | | |
| | I=0.01CV or 3 µA whichever is greater. (After 2 minutes application of rated voltage) | | CV ≤ 1000 | | | | | | | | | | | | | |
| | | | CV > 1000 | | | | | | | | | | | | | |
| | | I=0.1CV+40 µA (1minute) | I=0.04CV+100 µA (1minute) | | | | | | | | | | | | | |
| | | I=0.03CV+15 µA (5minutes) | I=0.02CV+25 µA (5minutes) | | | | | | | | | | | | | |
| I=Leakage Current(µA) C=Rated Capacitance(µF) V=Rated Voltage(V) | | | | | | | | | | | | | | | | |
| (tanδ) Dissipation Factor(MAX) | Rated Voltage(V) | | | | | | | | | | | | | (20°C, 120Hz) | | |
| | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | | 450 | |
| | | tan δ | 0.28 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 |
| When rated capacitance is over 1000 µF, tanδ shall be added 0.02 to the listed value with increase of every 1000 µF. | | | | | | | | | | | | | | | | |
| Endurance | After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements. | | | | | | | | | | | | | | | |
| | Capacitance Change | | Within ±25% of the initial value. | | | | | | | | | | Case Size | | Life Time(hrs) | |
| | Dissipation Factor | | Not more than 200% of the specified value. | | | | | | | | | | φ D ≤ 8 | | 1000 | |
| | Leakage Current | | Not more than the specified value. | | | | | | | | | | φ D ≥ 10 | | 2000 | |
| Low Temperature Stability Impedance Ratio(MAX) | Rated Voltage(V) | | | | | | | | | | | | | (120Hz) | | |
| | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | | 450 | |
| | Z(-25°C)/Z(20°C) | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 6 | | 6 | 7 |
| | | Z(-40°C)/Z(20°C) | 10 | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 8 | 8 | 10 | - |

◆DIMENSIONS

(mm)

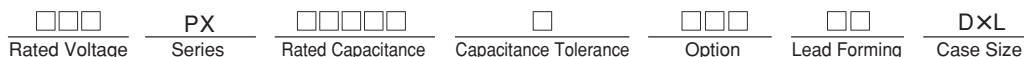
◆MULTIPLIER FOR RIPPLE CURRENT



Frequency coefficient

| Frequency (Hz) | 60(50) | 120 | 500 | 1k | 10k ≤ |
|----------------|--------|------|------|------|-------|
| 1 µF | 0.50 | 1.00 | 1.20 | 1.30 | 1.50 |
| 2.2~4.7 µF | 0.65 | 1.00 | 1.20 | 1.30 | 1.50 |
| 10~47 µF | 0.80 | 1.00 | 1.20 | 1.30 | 1.50 |
| 100~1000 µF | 0.80 | 1.00 | 1.10 | 1.15 | 1.20 |
| 2200~33000 µF | 0.80 | 1.00 | 1.05 | 1.10 | 1.15 |

◆PART NUMBER



◆ STANDARD SIZE

 Size ϕ DXL(mm), Ripple Current (mA r.m.s./105°C, 120Hz)

| Cap(μ F) | WV (V.DC) | 6.3 (0J) | | 10 (1A) | | 16 (1C) | | 25 (1E) | | 35 (1V) | | 50 (1H) | | 63 (1J) | |
|---------------|--------------|-------------|--------|------------|--------|------------|--------|------------|--------|------------|--------|------------|--------|------------|--------|
| | | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 100 | | | | | | | | | | | | 8X11.5 | 200 | 8X11.5 | 230 |
| 220 | | | | | | | | 6.3X11 | 240 | 8X11.5 | 300 | 10X12.5 | 360 | 10X16 | 390 |
| 330 | | | | | | 6.3X11 | 270 | 8X11.5 | 335 | 10X12.5 | 400 | 10X16 | 470 | 10X20 | 540 |
| 470 | | | | 6.3X11 | 295 | 8X11.5 | 375 | 8X11.5 | 440 | 10X12.5 | 525 | 10X20 | 600 | 12.5X20 | 700 |
| 680 | | 6.3X11 | 285 | 8X11.5 | 430 | 8X11.5 | 480 | 10X12.5 | 630 | 10X16 | 760 | 12.5X20 | 980 | 12.5X25 | 800 |
| 1000 | | 8X11.5 | 460 | 8X11.5 | 500 | 10X12.5 | 640 | 10X16 | 740 | 10X20 | 865 | 12.5X25 | 1060 | 16X25 | 1200 |
| 2200 | | 10X16 | 775 | 10X16 | 860 | 10X20 | 1050 | 12.5X20 | 1090 | 16X25 | 1370 | 16X31.5 | 1600 | 18X31.5 | 1400 |
| 3300 | | 10X20 | 985 | 10X20 | 1100 | 12.5X20 | 1300 | 16X25 | 1500 | 16X25 | 1680 | 18X35.5 | 1780 | | |
| 4700 | | 12.5X20 | 1150 | 12.5X20 | 1350 | 12.5X25 | 1650 | 16X25 | 1800 | 16X35.5 | 1870 | | | | |
| 6800 | | 12.5X25 | 1480 | 16X25 | 1700 | 16X25 | 1900 | 16X35.5 | 1910 | 18X35.5 | 1920 | | | | |
| 10000 | | 16X25 | 1700 | 16X25 | 1950 | 16X31.5 | 1950 | 18X35.5 | 2050 | | | | | | |
| 15000 | | 16X31.5 | 2090 | 16X35.5 | 2090 | 18X35.5 | 2070 | | | | | | | | |
| 22000 | | 18X31.5 | 2280 | 18X35.5 | 2180 | | | | | | | | | | |
| 33000 | | 18X40 | 2350 | | | | | | | | | | | | |

| Cap(μ F) | WV (V.DC) | 100 (2A) | | 160 (2C) | | 200 (2D) | | 250 (2E) | | 350 (2V) | | 400 (2G) | | 450 (2W) | |
|---------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
| | | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 1 | | | | | | | | | | | | | | 6.3X11 | 15 |
| 2.2 | | | | | | | | | | 6.3X11 | 25 | 8X11.5 | 31 | 8X11.5 | 20 |
| 3.3 | | | | | | | | 6.3X11 | 30 | 8X11.5 | 30 | 8X11.5 | 34 | 10X12.5 | 33 |
| 4.7 | | | | | | 6.3X11 | 40 | 8X11.5 | 45 | 8X11.5 | 45 | 10X12.5 | 42 | 10X12.5 | 35 |
| 10 | | | | 8X11.5 | 77 | 8X11.5 | 57 | 10X12.5 | 90 | 10X16 | 95 | 10X16 | 64 | 10X20 | 37 |
| 22 | | | | 10X12.5 | 92 | 10X16 | 105 | 10X16 | 105 | 12.5X20 | 175 | 12.5X20 | 140 | 12.5X25 | 100 |
| 33 | | 8X11.5 | 140 | 10X16 | 125 | 10X20 | 140 | 10X20 | 140 | 12.5X25 | 220 | 16X25 | 170 | 16X25 | 125 |
| 47 | | 8X11.5 | 185 | 10X20 | 150 | 10X20 | 195 | 12.5X20 | 190 | 16X25 | 260 | 16X25 | 200 | 16X31.5 | 155 |
| 100 | | 10X16 | 290 | 12.5X25 | 320 | 16X25 | 340 | 16X25 | 310 | 18X31.5 | 370 | 18X35.5 | 310 | 18X40 | 200 |
| 220 | | 12.5X20 | 560 | 16X31.5 | 410 | 16X35.5 | 580 | 18X35.5 | 485 | | | | | | |
| 330 | | 12.5X25 | 690 | 18X31.5 | 570 | 18X40 | 675 | | | | | | | | |
| 470 | | 16X25 | 880 | 18X40 | 855 | | | | | | | | | | |
| 680 | | 16X31.5 | 900 | | | | | | | | | | | | |
| 1000 | | 18X35.5 | 985 | | | | | | | | | | | | |

Refer to YXA series for low capacitance models.