

FEATURES

- HIGH TEMPERATURE 125°C LONG LIFE
- 6.3, 8 & 10MM 2000hrs, 12.5, 16 3000hrs LIFE, 18mm 5000hours
- WIDE TEMPERATURE RANGE
- DESIGNED FOR AUTOMATIC MOUNTING
- SOLVENT RESISTANT

PART NUMBERING

| Part Number Example: MXLXH-025/331M10X10TR13F | | | | | | | | | |
|---|---|------------------|---|------------------------|----------------|-------|----------------|-----------|----------------|
| MXLXH | - | 025 | / | 331 | M | 10X10 | TR | 13 | F |
| Type | | Rated DC Voltage | | Capacitance Code (µF)* | Tolerance Code | Size | Package Code** | Reel Size | RoHs Compliant |
| * Capacitance Code: First two digits represent significant figure, third digit represents multiplier (number of zeros). | | | | | | | | | |
| ** Package Code: TR = Tape & Reel. | | | | | | | | | |

SPECIFICATIONS

| Performance Characteristics | | | | |
|--|---------------------|--|-----|-----|
| Operating Temperature Range | -40°C ~ +125°C. | | | |
| Voltage Range | 16DC ~ 35VDC. | | | |
| Capacitance Range | 47µF ~ 3900µF. | | | |
| Capacitance Tolerance | ±20%. | | | |
| Maximum Dissipation Factor (20°C, 120Hz) | Rated Voltage (VDC) | 16 | 25 | 35 |
| | DF% | 20% | 16% | 14% |
| Maximum Leakage Current (20°C) (after 2 minutes) | 0.01CV | | | |
| Load Life Test 105°C D 6.3 to 10mm 2000 hours, D12.5, 16 3000 hours, D 18mm 5000 hours | Capacitance Change | Within ±30% of initial measured value. | | |
| | DF% | Less than 300% of specified value. | | |
| | Leakage Current | Within maximum specified value. | | |

STANDARD PRODUCT TABLE (dØ X L(mm))

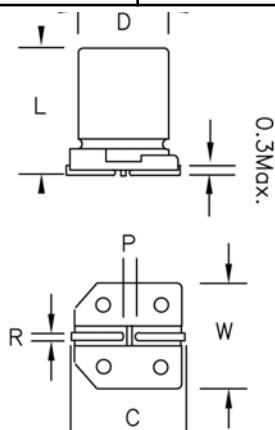
| Cap. (µF) | WVDC | | |
|-----------|-----------|-----------|-----------|
| | 16 | 25 | 35 |
| 47 | | | 6.3X7.7 |
| 100 | 6.3X7.7 | 6.3X7.7 | 8X10.2 |
| 160 | | | 8X10.2 |
| 220 | | 8X10.2 | 10X10.2 |
| 270 | | 8X10.2 | |
| 300 | | | 10X10.2 |
| 330 | 8X10.2 | 10X10.2 | 12.5X13.5 |
| 390 | 8X10.2 | | |
| 470 | 10X10.2 | 10X10.2 | 12.5X13.5 |
| 620 | | | 12.5X13.5 |
| 680 | 10X10.2 | 12.5X13.5 | 16X16.5 |
| 910 | | 12.5X13.5 | |
| 1000 | 12.5X13.5 | 16X16.5 | 16X16.5 |
| 1500 | 12.5X13.5 | 16X16.5 | 18X16.5 |
| 2200 | 16X16.5 | 18X16.5 | 18X21.5 |
| 3300 | 18X16.5 | 18X21.5 | |
| 3900 | 18X21.5 | | |

MAXIMUM ESR (Ω @ 100KHz & 20°C /40°C)

| Cap. (μ F) | WVDC | | |
|-----------------|-------------|-------------|-------------|
| | 16 | 25 | 35 |
| 47 | | | 0.45/5.0 |
| 100 | 0.45/5.0 | 0.45/5.0 | 0.18/3.0 |
| 160 | | | 0.18/3.0 |
| 220 | | 0.18/3.0 | 0.11/ 2.0 |
| 270 | | 0.18/3.0 | |
| 300 | | | 0.11/ 2.0 |
| 330 | 0.18/3.0 | 0.11/ 2.0 | 0.08/ 1.0 |
| 390 | 0.18/3.0 | | |
| 470 | 0.11/ 2.0 | 0.11/ 2.0 | 0.08/ 1.0 |
| 620 | | | 0.08/ 1.0 |
| 680 | 0.11/ 2.0 | 0.08/ 1.0 | 0.05/ 0.5 |
| 910 | | 0.08/ 1.0 | |
| 1000 | 0.08/ 1.0 | 0.05/ 0.5 | 0.05/ 0.5 |
| 1500 | 0.08/ 1.0 | 0.05/ 0.5 | 0.045/ 0.45 |
| 2200 | 0.05/ 0.5 | 0.045/ 0.45 | 0.04/ 0.4 |
| 3300 | 0.045/ 0.45 | 0.04/ 0.4 | |
| 3900 | 0.04/ 0.4 | | |

MAXIMUM RIPPLE (mA rms @ 100KHZ & 125°C)

| Cap. (μ F) | WVDC | | |
|-----------------|------|------|------|
| | 16 | 25 | 35 |
| 47 | | | 200 |
| 100 | 200 | 200 | 300 |
| 160 | | | 300 |
| 220 | | 300 | 500 |
| 270 | | 300 | |
| 300 | | | 500 |
| 330 | 300 | 500 | 1200 |
| 390 | 300 | | |
| 470 | 500 | 500 | 1200 |
| 620 | | | 1200 |
| 680 | 500 | 1200 | 1800 |
| 910 | | 1200 | |
| 1000 | 1200 | 1800 | 1800 |
| 1500 | 1200 | 1800 | 2000 |
| 2200 | 1800 | 2000 | 2200 |
| 3300 | 2000 | 2200 | |
| 3900 | 2200 | | |



| size D X L | D +0.5 Max | L MAX | W \pm 0.2 | C \pm 0.2 | R | P \pm 0.2 |
|-------------|------------|-------|-------------|-------------|----------|-------------|
| 6.3 X 7.7 | 6.3 | 8 | 6.6 | 7.3 | 0.5 ~0.8 | 2.2 |
| 8 X 10.2 | 8.0 | 10.5 | 8.3 | 9 | 0.7 ~1.0 | 3.2 |
| 10 X 10.2 | 10.0 | 10.5 | 10.3 | 11 | 1.0 ~1.4 | 4.6 |
| 12.5 X 13.5 | 12.5 | 14 | 12.8 | 13.5 | 1.0 ~1.4 | 4.6 |
| 16 X 16.5 | 16.0 | 17 | 16.3 | 17.3 | 1.8~2.1 | 7.0 |
| 18 X 16.5 | 18.0 | 17 | 19.0 | 20 | 1.7~2.1 | 7.0 |
| 18 X 21.5 | 18 | 22.5 | 19 | 20 | 1.7~2.1 | 7.0 |