

FEATURES

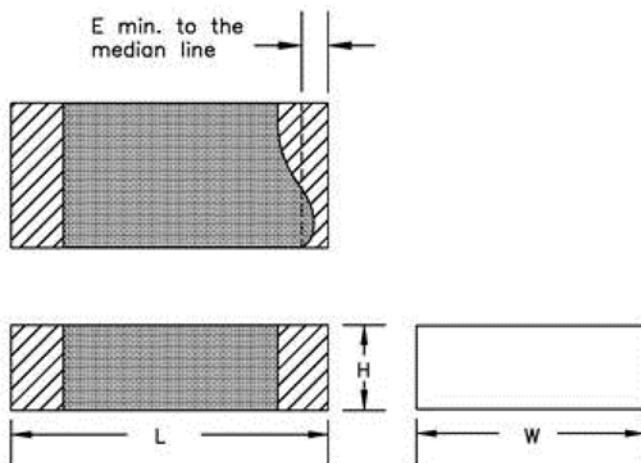
- Unencapsulated stacked metallized high temperature polyethylene terephthalate (PET-HT) film construction, non-inductive.
- High CV, small sizes in EIA 2220, 2824, 4030, 5040, & 6054.
- Wide temperature range (-55°C ~ +125°C).
- IR or vapor reflow compatible soldering.
- Tape/reel package available in all sizes.
- High heat and moisture resistance.
- Stable temperature, frequency and bias characteristics.
- Excellent thermal shock resistance.
- No piezoelectric effect.

PART NUMBERING

| Part Number Example: 931AF-100/105JTR2824F | | | | | | | | |
|--|---|------------------|---|------------------------|----------------|----------------|-----------|----------------|
| 931AF | - | 100 | / | 105 | J | TR | 2824 | F |
| Type | | Rated DC Voltage | | Capacitance Code (pF)* | Tolerance Code | Package Code** | Case Size | RoHS Compliant |
| * Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros). | | | | | | | | |
| ** Package Code: TR = Tape & Reel. | | | | | | | | |

SPECIFICATIONS

| Performance Characteristics | |
|---|--|
| Operating Temperature Range | -55°C ~ +125°C with voltage derating of 1.25%/°C between 105°C & 125°C. |
| Voltage Range | 63VDC to 630VDC. |
| Withstanding Voltage (between leads) (20°C) | 1.4 times rated voltage for 2 seconds. |
| Capacitance Range (20°C, 1KHz) | 0.01µF ~ 4.7µF. |
| Capacitance Tolerance | ±5% & ±10%. |
| Maximum Dissipation Factor % (20°C, 1KHz) | <1.0. |
| Minimum Insulation Resistance (20°C) (after 1 minute minimum) | >1000MΩ measured @ 10VDC for WVDC < 100VDC & measured @ 100VDC for WVDC ≥ 100VDC (C ≤ 0.33µF). 400 seconds measured @ 10VDC for WVDC < 100VDC & measured @ 100VDC for WVDC ≥ 100VDC (C > 0.33µF). |



SIZE (mm)

| Case Code | Dimensions | | |
|-----------|-------------|-----|-------------|
| | L | E | W |
| 2220 | 5.7 ± 0.50 | 0.2 | 5.0 ± 0.50 |
| 2824 | 7.1 ± 0.50 | 0.2 | 6.1 ± 0.50 |
| 4030 | 10.2 ± 0.60 | 0.2 | 7.6 ± 0.80 |
| 5040 | 12.7 ± 0.60 | 0.2 | 10.2 ± 0.80 |
| 6054 | 15.2 ± 0.60 | 0.2 | 13.7 ± 0.80 |

STANDARD PRODUCTS TABLE BY EIA SIZE

| Cap. (μ F) | Cap. Code | 63VDC / 40VAC | 100VDC / 63VAC | 250VDC / 160VAC | 400VDC / 200VAC | 630VDC / 250VAC |
|--------------------|--------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | EIA Size / T Max. | EIA Size / T Max. | EIA Size / T Max. | EIA Size / T Max. | EIA Size / T Max. |
| 0.010 | 103 | | | | 2220 / 3.0 | 2220 / 2.8 |
| 0.012 | 123 | | | | 2220 / 2.4 | 2220 / 3.3 |
| 0.015 | 153 | | | | 2220 / 4.0 | 2220 / 4.0 |
| 0.018 | 183 | | | | 2824 / 2.8 | 2824 / 2.8 |
| 0.022 | 223 | | | | 2824 / 3.5 | 2824 / 3.5 |
| 0.027 | 273 | | | | 2824 / 2.8 | 2824 / 4.1 |
| 0.033 | 333 | | | | 2824 / 3.3 | 2824 / 5.0 |
| 0.047 | 473 | | | 2220 / 3.0 | 2824 / 4.5 | 4030 / 3.6 |
| 0.056 | 563 | | | 2220 / 3.6 | 4030 / 3.1 | 4030 / 4.3 |
| 0.068 | 683 | | | 2220 / 4.0 | 4030 / 3.6 | 4030 / 5.2 |
| 0.082 | 823 | | | 2220 / 4.0 | 4030 / 4.2 | 5040 / 4.3 |
| 0.10 | 104 | | | 2220 / 4.0 | 4030 / 4.7 | 5040 / 5.0 |
| 0.12 | 124 | | | 2824 / 4.3 | 5040 / 3.9 | 5040 / 5.6 |
| 0.15 | 154 | | | 2824 / 4.3 | 5040 / 4.6 | 5040 / 6.9 |
| 0.18 | 184 | | 2220 / 2.3 | 2824 / 5.1 | 5040 / 5.6 | 6054 / 5.0 |
| 0.22 | 224 | | 2220 / 3.3 | 2824 / 4.9 | 5040 / 6.8 | 6054 / 5.8 |
| 0.27 | 273 | 2220 / 2.8 | 2220 / 3.4 | 4030 / 4.8 | 5040 / 6.8 | 6054 / 7.2 |
| 0.33 | 334 | 2220 / 3.3 | 2220 / 4.0 | 4030 / 5.6 | 6054 / 5.6 | |
| 0.39 | 394 | 2220 / 3.4 | 2220 / 3.9 | 4030 / 5.4 | | |
| 0.47 | 474 | 2220 / 3.5 | 2220 / 4.3 | 4030 / 6.15 | 6054 / 6.2 | |
| 0.56 | 564 | 2220 / 3.5 | 2824 / 4.2 | 5040 / 5.6 | | |
| 0.68 | 684 | 2220 / 4.0 | 2824 / 5.0 | 5040 / 6.5 | | |
| 0.82 | 824 | 2824 / 3.7 | 2824 / 4.7 | 6054 / 5.1 | | |
| 1.0 | 105 | 2824 / 3.7 | 2824 / 5.7 | 6054 / 6.0 | | |
| 1.5 | 155 | 2824 / 5.8 | 4030 / 6.1 | 6054 / 7.0 | | |
| 2.2 | 225 | 4030 / 5.8 | 5040 / 5.5 | | | |
| 3.3 | 335 | 5040 / 5.5 | 6054 / 5.2 | | | |
| 4.7 | 475 | 6054 / 4.9 | 6054 / 7.1 | | | |