

High-Voltage Types Application Guide, Transmitting Mica

Types 271, 272, 273 — Rectangular Case, High-Current and High-Voltage Circuits



Types 271, 272, 273 are designed for frequencies ranging from 100 kHz to 3 MHz and are well suited for high-current and high-voltage radio transmitter circuit applications. Cast in rectangular cases, these capacitors are electrically equivalent to MIL-C-5 Styles CM65 through CM73 in capacitance and current ratings, but are far superior in environmental capability, temperature range, physical size, mounting configuration and reliability.

Highlights

- Type 273 permits stand-off mounting
- Highly shock resistant
- Optional aluminum mounting plates
- Convenient mounting
- Cast in rectangular cases

Specifications

| | |
|---|--------------------------------------|
| Capacitance Range | 47 pF to 0.1 μ F |
| Capacitance Tolerance | \pm 5% (J) |
| Rated Voltage | 1 to 60 kVpk |
| Operating Temperature Range with Ripple | -55 $^{\circ}$ C to 125 $^{\circ}$ C |

Type 271 Ratings

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 $^{\circ}$ C | | | |
|------------------------|------------------------|---------------------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 250 Peak Volts | | | | | |
| 47000 | 27102B473JO0 | 11.0 | 11.0 | 9.1 | 4.7 |
| 50000 | 27102B503JO0 | 11.0 | 11.0 | 9.1 | 4.7 |
| 51000 | 27102B513JO0 | 11.0 | 11.0 | 9.1 | 4.7 |
| 56000 | 27102B563JO0 | 11.0 | 11.0 | 9.1 | 4.7 |
| 62000 | 27102B623JO0 | 11.0 | 11.0 | 9.1 | 5.1 |
| 68000 | 27102B683JO0 | 11.0 | 11.0 | 9.1 | 5.1 |
| 75000 | 27102B753JO0 | 11.0 | 11.0 | 9.1 | 5.1 |
| 82000 | 27102B823JO0 | 11.0 | 11.0 | 9.1 | 5.1 |
| 91000 | 27102B913JO0 | 11.0 | 11.0 | 9.1 | 5.6 |
| 100000 | 27102B104JO0 | 11.0 | 11.0 | 9.1 | 5.6 |
| 500 Peak Volts | | | | | |
| 27000 | 27105B273JO0 | 11.0 | 11.0 | 7.5 | 3.9 |
| 30000 | 27105B303JO0 | 11.0 | 11.0 | 8.2 | 3.9 |
| 33000 | 27105B333JO0 | 11.0 | 11.0 | 8.2 | 4.3 |
| 36000 | 27105B363JO0 | 11.0 | 11.0 | 8.2 | 4.3 |
| 39000 | 27105B393JO0 | 11.0 | 11.0 | 8.2 | 4.3 |
| 43000 | 27105B433JO0 | 11.0 | 11.0 | 9.1 | 4.7 |
| 1000 Peak Volts | | | | | |
| 10000 | 27110B103JO0 | 10.0 | 9.1 | 5.1 | 2.4 |
| 11000 | 27110B113JO0 | 11.0 | 10.0 | 5.6 | 2.7 |
| 12000 | 27110B123JO0 | 11.0 | 10.0 | 6.2 | 3.0 |
| 13000 | 27110B133JO0 | 11.0 | 11.0 | 6.8 | 3.0 |
| 15000 | 27110B153JO0 | 11.0 | 11.0 | 6.8 | 3.3 |
| 16000 | 27110B163JO0 | 11.0 | 11.0 | 6.8 | 3.3 |
| 18000 | 27110B183JO0 | 11.0 | 11.0 | 7.5 | 3.3 |
| 20000 | 27110B203JO0 | 11.0 | 11.0 | 7.5 | 3.6 |
| 22000 | 27110B223JO0 | 11.0 | 11.0 | 7.5 | 3.6 |
| 24000 | 27110B243JO0 | 11.0 | 11.0 | 7.5 | 3.6 |

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 $^{\circ}$ C | | | |
|------------------------|------------------------|---------------------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 1500 Peak Volts | | | | | |
| 8000 | 27115B802JO0 | 10.0 | 8.2 | 4.7 | 2.2 |
| 8200 | 27115B822JO0 | 10.0 | 8.2 | 4.7 | 2.2 |
| 9100 | 27115B912JO0 | 10.0 | 8.2 | 4.7 | 2.4 |
| 2700 | 27120B272JO0 | 6.8 | 5.1 | 2.7 | 1.3 |
| 2000 Peak Volts | | | | | |
| 3000 | 27120B302JO0 | 7.5 | 5.1 | 3.0 | 1.3 |
| 3300 | 27120B332JO0 | 7.5 | 5.6 | 3.0 | 1.5 |
| 3600 | 27120B362JO0 | 7.5 | 5.6 | 3.3 | 1.5 |
| 3900 | 27120B392JO0 | 8.2 | 6.2 | 3.3 | 1.6 |
| 4000 | 27120B402JO0 | 8.2 | 6.2 | 3.3 | 1.6 |
| 4300 | 27120B432JO0 | 8.2 | 6.2 | 3.6 | 1.6 |
| 4700 | 27120B472JO0 | 8.2 | 6.8 | 3.6 | 1.8 |
| 5000 | 27120B502JO0 | 8.2 | 6.8 | 3.6 | 1.8 |
| 5100 | 27120B512JO0 | 8.2 | 6.8 | 3.6 | 1.8 |
| 5600 | 27120B562JO0 | 9.1 | 7.5 | 3.9 | 2.0 |
| 6000 | 27120B602JO0 | 9.1 | 7.5 | 4.3 | 2.0 |
| 6200 | 27120B622JO0 | 9.1 | 7.5 | 4.3 | 2.0 |
| 6800 | 27120B682JO0 | 10.0 | 7.5 | 4.3 | 2.0 |
| 7500 | 27120B752JO0 | 10.0 | 8.2 | 4.7 | 2.2 |
| 3000 Peak Volts | | | | | |
| 47 | 27130B470JO0 | 1.2 | 0.5 | 0.2 | 0.1 |
| 51 | 27130B510JO0 | 1.3 | 0.5 | 0.2 | 0.1 |
| 56 | 27130B560JO0 | 1.3 | 0.6 | 0.2 | 0.1 |
| 62 | 27130B620JO0 | 1.5 | 0.6 | 0.2 | 0.1 |
| 68 | 27130B680JO0 | 1.5 | 0.6 | 0.2 | 0.1 |
| 75 | 27130B750JO0 | 1.5 | 0.6 | 0.3 | 0.1 |
| 82 | 27130B820JO0 | 1.6 | 0.7 | 0.3 | 0.1 |
| 91 | 27130B910JO0 | 1.6 | 0.7 | 0.3 | 0.1 |

High-Voltage Types Application Guide, Transmitting Mica

Type 271 Ratings

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|------------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 3000 Peak Volts | | | | | |
| 100 | 27105B273J00 | 11.0 | 11.0 | 7.5 | 3.9 |
| 110 | 27130B111J00 | 1.8 | 0.8 | 0.4 | 0.1 |
| 120 | 27130B121J00 | 2.0 | 0.9 | 0.4 | 0.2 |
| 130 | 27130B131J00 | 2.0 | 0.9 | 0.4 | 0.2 |
| 150 | 27130B151J00 | 2.2 | 1.0 | 0.5 | 0.2 |
| 160 | 27130B161J00 | 2.2 | 1.1 | 0.5 | 0.2 |
| 180 | 27130B181J00 | 2.4 | 1.1 | 0.6 | 0.2 |
| 200 | 27130B201J00 | 2.4 | 1.2 | 0.6 | 0.2 |
| 220 | 27130B221J00 | 2.7 | 1.3 | 0.6 | 0.3 |
| 240 | 27130B241J00 | 2.7 | 1.3 | 0.7 | 0.3 |
| 250 | 27130B251J00 | 2.7 | 1.3 | 0.7 | 0.3 |
| 270 | 27130B271J00 | 3.1 | 1.5 | 0.8 | 0.3 |
| 300 | 27130B301J00 | 3.0 | 1.5 | 0.8 | 0.4 |
| 330 | 27130B331J00 | 3.0 | 1.6 | 0.8 | 0.4 |
| 360 | 27130B361J00 | 3.3 | 1.6 | 0.9 | 0.4 |
| 390 | 27130B391J00 | 3.3 | 1.8 | 0.9 | 0.4 |
| 430 | 27130B431J00 | 3.6 | 1.8 | 1.0 | 0.5 |
| 470 | 27130B471J00 | 3.6 | 2.0 | 1.1 | 0.5 |
| 500 | 27130B501J00 | 3.6 | 2.0 | 1.1 | 0.5 |
| 510 | 27130B511J00 | 3.6 | 2.0 | 1.1 | 0.5 |
| 560 | 27130B561J00 | 3.9 | 2.2 | 1.2 | 0.5 |
| 620 | 27130B621J00 | 3.9 | 2.4 | 1.2 | 0.6 |
| 680 | 27130B681J00 | 4.3 | 2.4 | 1.3 | 0.6 |
| 750 | 27130B751J00 | 4.3 | 2.7 | 1.3 | 0.6 |
| 820 | 27130B821J00 | 4.3 | 2.7 | 1.5 | 0.7 |
| 910 | 27130B911J00 | 4.7 | 3.0 | 1.5 | 0.7 |
| 1000 | 27130B102J00 | 4.7 | 3.0 | 1.6 | 0.8 |
| 1100 | 27130B112J00 | 5.1 | 3.3 | 1.6 | 0.8 |
| 1200 | 27130B122J00 | 5.1 | 3.3 | 1.8 | 0.8 |
| 1300 | 27130B132J00 | 5.6 | 3.6 | 1.8 | 0.9 |
| 1500 | 27130B152J00 | 5.6 | 3.9 | 2.0 | 0.9 |
| 1600 | 27130B162J00 | 5.6 | 3.9 | 2.0 | 1.0 |
| 1800 | 27130B182J00 | 6.2 | 4.3 | 2.2 | 1.1 |
| 2000 | 27130B202J00 | 6.2 | 4.3 | 2.4 | 1.1 |
| 2200 | 27130B222J00 | 6.8 | 4.7 | 2.4 | 1.2 |

Type 272 Ratings

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|-----------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 250 Peak Volts | | | | | |
| 250000 | 27202B254J00 | 15.0 | 18.0 | 15.0 | 8.2 |

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|------------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 500 Peak Volts | | | | | |
| 82000 | 27205B823J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 91000 | 27205B913J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 100000 | 27205B104J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 200000 | 27205B204J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 1000 Peak Volts | | | | | |
| 56000 | 27210B563J00 | 15.0 | 16.0 | 15.0 | 8.2 |
| 62000 | 27210B623J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 68000 | 27210B683J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 75000 | 27215B333J00 | 15.0 | 18.0 | 15.0 | 8.2 |
| 1500 Peak Volts | | | | | |
| 24000 | 27215B243J00 | 13.0 | 15.0 | 12.0 | 6.8 |
| 27000 | 27215B273J00 | 13.0 | 15.0 | 12.0 | 6.8 |
| 30000 | 27215B303J00 | 13.0 | 15.0 | 12.0 | 6.8 |
| 33000 | 27215B333J00 | 13.0 | 15.0 | 13.0 | 7.5 |
| 36000 | 27215B363J00 | 13.0 | 16.0 | 13.0 | 7.5 |
| 39000 | 27215B393J00 | 15.0 | 16.0 | 13.0 | 7.5 |
| 43000 | 27215B433J00 | 15.0 | 16.0 | 13.0 | 7.5 |
| 47000 | 27215B473J00 | 15.0 | 16.0 | 13.0 | 7.5 |
| 50000 | 27215B503J00 | 15.0 | 16.0 | 15.0 | 7.5 |
| 51000 | 27215B513J00 | 15.0 | 16.0 | 15.0 | 7.5 |
| 2000 Peak Volts | | | | | |
| 8200 | 27220B822J00 | 10.0 | 10.0 | 7.5 | 3.9 |
| 9100 | 27220B912J00 | 11.0 | 10.0 | 8.2 | 4.3 |
| 10000 | 27220B103J00 | 11.0 | 11.0 | 8.2 | 4.3 |
| 11000 | 27220B113J00 | 11.0 | 11.0 | 8.2 | 4.7 |
| 12000 | 27220B123J00 | 11.0 | 11.0 | 9.1 | 4.7 |
| 13000 | 27220B133J00 | 12.0 | 12.0 | 9.1 | 5.1 |
| 15000 | 27220B153J00 | 12.0 | 12.0 | 10.0 | 5.1 |
| 16000 | 27220B163J00 | 12.0 | 12.0 | 10.0 | 5.6 |
| 18000 | 27220B183J00 | 12.0 | 13.0 | 10.0 | 5.6 |
| 20000 | 27220B203J00 | 13.0 | 13.0 | 11.0 | 6.2 |
| 22000 | 27220B223J00 | 13.0 | 13.0 | 11.0 | 6.2 |
| 3000 Peak Volts | | | | | |
| 2700 | 27230B272J00 | 8.2 | 6.8 | 4.3 | 2.2 |
| 3000 | 27230B302J00 | 8.2 | 6.8 | 4.7 | 2.2 |
| 3300 | 27230B332J00 | 8.2 | 6.8 | 4.7 | 2.4 |
| 3600 | 27230B362J00 | 8.2 | 7.5 | 5.1 | 2.4 |
| 3900 | 27230B392J00 | 9.1 | 7.5 | 5.6 | 2.7 |
| 4300 | 27230B432J00 | 9.1 | 7.5 | 5.6 | 2.7 |
| 4700 | 27230B472J00 | 9.1 | 8.2 | 6.2 | 3.0 |
| 5000 | 27230B502J00 | 9.1 | 8.2 | 6.2 | 3.0 |

High-Voltage Types Application Guide, Transmitting Mica

Type 272 Ratings

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|------------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 3000 Peak Volts | | | | | |
| 5100 | 27230B512J00 | 9.1 | 8.2 | 6.2 | 3.0 |
| 5600 | 27230B562J00 | 9.1 | 9.1 | 6.2 | 3.3 |
| 6000 | 27230B602J00 | 10.0 | 9.1 | 6.8 | 3.6 |
| 6200 | 27230B622J00 | 10.0 | 9.1 | 6.8 | 3.6 |
| 6800 | 27230B682J00 | 10.0 | 9.1 | 6.8 | 3.6 |
| 7500 | 27230B752J00 | 10.0 | 9.1 | 6.8 | 3.9 |
| 5000 Peak Volts | | | | | |
| 47 | 27250B470J00 | 1.5 | 0.6 | 0.2 | 0.1 |
| 51 | 27250B510J00 | 1.6 | 0.7 | 0.2 | 0.1 |
| 56 | 27250B560J00 | 1.8 | 0.8 | 0.3 | 0.1 |
| 62 | 27250B620J00 | 1.8 | 0.8 | 0.3 | 0.1 |
| 68 | 27250B680J00 | 2.0 | 0.9 | 0.3 | 0.1 |
| 75 | 27250B750J00 | 2.0 | 1.0 | 0.4 | 0.1 |
| 82 | 27250B820J00 | 2.2 | 1.1 | 0.4 | 0.1 |
| 91 | 27250B910J00 | 2.4 | 1.2 | 0.4 | 0.1 |
| 100 | 27250B101J00 | 2.4 | 1.2 | 0.4 | 0.1 |
| 110 | 27250B111J00 | 2.7 | 1.3 | 0.5 | 0.2 |
| 120 | 27250B121J00 | 2.7 | 1.5 | 0.6 | 0.2 |
| 130 | 27250B131J00 | 3.0 | 1.6 | 0.6 | 0.2 |
| 150 | 27250B151J00 | 3.3 | 1.8 | 0.7 | 0.2 |
| 160 | 27250B161J00 | 3.3 | 1.8 | 0.8 | 0.3 |
| 180 | 27250B181J00 | 3.3 | 2.0 | 0.8 | 0.3 |
| 200 | 27250B201J00 | 3.6 | 2.0 | 0.8 | 0.3 |
| 220 | 27250B221J00 | 3.6 | 2.2 | 0.9 | 0.4 |
| 240 | 27250B241J00 | 3.6 | 2.4 | 1.0 | 0.4 |
| 250 | 27250B251J00 | 3.6 | 2.4 | 1.0 | 0.4 |
| 270 | 27250B271J00 | 3.9 | 2.4 | 1.1 | 0.5 |
| 300 | 27250B301J00 | 3.9 | 2.7 | 1.1 | 0.5 |
| 330 | 27250B331J00 | 4.3 | 2.7 | 1.2 | 0.5 |
| 360 | 27250B361J00 | 4.3 | 2.7 | 1.3 | 0.6 |
| 390 | 27250B391J00 | 4.3 | 2.7 | 1.3 | 0.6 |
| 430 | 27250B431J00 | 4.7 | 3.0 | 1.5 | 0.7 |
| 470 | 27250B471J00 | 4.7 | 3.3 | 1.5 | 0.7 |
| 500 | 27250B501J00 | 4.7 | 3.3 | 1.6 | 0.8 |
| 510 | 27250B511J00 | 4.7 | 3.3 | 1.6 | 0.8 |
| 560 | 27250B561J00 | 5.1 | 3.6 | 1.8 | 0.8 |
| 600 | 27250B601J00 | 5.1 | 3.6 | 1.8 | 0.8 |
| 620 | 27250B621J00 | 5.1 | 3.6 | 1.8 | 0.8 |
| 680 | 27250B681J00 | 2.1 | 3.6 | 1.8 | 0.8 |
| 750 | 27250B751J00 | 5.6 | 3.9 | 2.2 | 0.9 |

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|-------------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 5000 Peak Volts | | | | | |
| 820 | 27250B821J00 | 5.6 | 3.9 | 2.4 | 1.0 |
| 910 | 27250B911J00 | 5.6 | 4.3 | 2.4 | 1.1 |
| 1000 | 27250B102J00 | 6.2 | 4.3 | 2.4 | 1.2 |
| 1100 | 27250B112J00 | 6.2 | 4.7 | 2.7 | 1.2 |
| 1200 | 27250B122J00 | 6.2 | 4.7 | 2.7 | 1.3 |
| 1300 | 27250B132J00 | 6.8 | 5.1 | 3.0 | 1.3 |
| 1500 | 27250B152J00 | 6.8 | 5.1 | 3.3 | 1.5 |
| 1600 | 27250B162J00 | 6.8 | 5.6 | 3.6 | 1.5 |
| 1800 | 27250B182J00 | 7.5 | 5.6 | 3.6 | 1.6 |
| 2000 | 27250B202J00 | 7.5 | 6.2 | 3.6 | 1.8 |
| 2200 | 27250B222J00 | 7.5 | 6.2 | 3.9 | 2.0 |
| 2400 | 27250B242J00 | 8.2 | 6.2 | 4.3 | 2.0 |
| 40000 Peak Volts | | | | | |
| 1100 | 272400B112J00 | 15.5 | 12.7 | 8.0 | 4.7 |
| 1300 | 272400B132J00 | 18.7 | 15.5 | 9.8 | 5.9 |
| 1500 | 272400B152J00 | 19.4 | 16.4 | 10.5 | 6.3 |
| 50000 Peak Volts | | | | | |
| 900 | 272500B901J00 | 16.4 | 13.1 | 8.2 | 4.9 |
| 1000 | 272500B102J00 | 16.6 | 13.5 | 8.6 | 5.1 |
| 1200 | 272500B122J00 | 18.1 | 14.9 | 9.4 | 5.6 |
| 60000 Peak Volts | | | | | |
| 800 | 272600B801J00 | 16.0 | 12.5 | 7.7 | 4.6 |
| 900 | 272600B901J00 | 16.4 | 13.1 | 8.2 | 4.9 |
| 1000 | 272600B102J00 | 16.3 | 13.3 | 8.5 | 5.1 |

Type 273 Ratings

| 400 Peak Volts | | | | | |
|------------------------|--------------|------|------|------|------|
| 1000000 | 27304B204J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 600 Peak Volts | | | | | |
| 200000 | 27306B204J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 250000 | 27306B254J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 300000 | 27306B304J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 400000 | 27306B404J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 500000 | 27306B504J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 600000 | 27306B604J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 750000 | 27306B754J00 | 18.0 | 25.0 | 22.0 | 12.0 |
| 2000 Peak Volts | | | | | |
| 100000 | 27320B104J00 | 18.0 | 23.0 | 18.0 | 10.5 |
| 4000 Peak Volts | | | | | |
| 25000 | 27340B253J00 | 18.0 | 24.0 | 19.0 | 11.5 |
| 30000 | 27340B303J00 | 18.0 | 24.0 | 19.0 | 11.5 |

High-Voltage Types Application Guide, Transmitting Mica

Type 273 Ratings

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|------------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 4000 Peak Volts | | | | | |
| 40000 | 27340B403JO0 | 18.0 | 24.0 | 20.0 | 12.0 |
| 50000 | 27340B503JO0 | 18.0 | 25.0 | 21.0 | 12.0 |
| 5000 Peak Volts | | | | | |
| 20000 | 27350B203JO0 | 18.0 | 23.0 | 18.0 | 10.5 |
| 8000 Peak Volts | | | | | |
| 200 | 27380B201JO0 | 7.5 | 5.0 | 1.5 | 0.5 |
| 250 | 27380B251JO0 | 7.5 | 5.0 | 1.5 | 0.5 |
| 500 | 27380B501JO0 | 8.5 | 6.0 | 3.0 | 1.0 |

| Cap (pF) | Catalog Part Number | Maximum AC Current at 65 °C | | | |
|------------------------|------------------------|-----------------------------|--------------|----------------|----------------|
| | | 3 MHz (A) | 1 MHz (A) | 300 kHz (A) | 100 kHz (A) |
| 8000 Peak Volts | | | | | |
| 1000 | 27380B102JO0 | 10.0 | 8.5 | 4.5 | 1.5 |
| 2000 | 27380B202JO0 | 11.5 | 11.5 | 7.5 | 3.0 |
| 3000 | 27380B302JO0 | 12.5 | 13.5 | 9.5 | 4.0 |
| 4000 | 27380B402JO0 | 13.5 | 15.5 | 10.5 | 5.0 |
| 4500 | 27380B452JO0 | 14.0 | 16.0 | 11.5 | 6.0 |
| 5000 | 27380B502JO0 | 14.0 | 16.0 | 11.5 | 6.0 |
| 6000 | 27380B602JO0 | 15.0 | 17.0 | 12.5 | 6.5 |
| 8000 | 27380B802JO0 | 16.0 | 19.0 | 14.0 | 7.5 |
| 60000 | 27380B103JO0 | 17.0 | 20.0 | 15.0 | 8.5 |

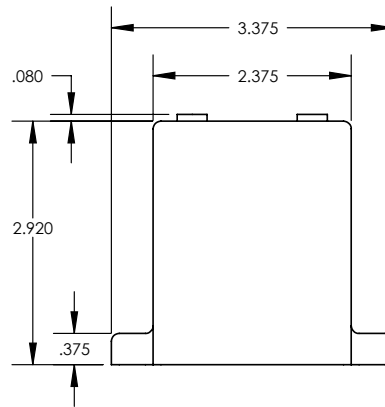
Dimensions

Type 271



High-Voltage Types Application Guide, Transmitting Mica

Type 273



Tolerances Unless
Otherwise Specified $\pm .031$

Type 271 (CM 66)
Rated Current Versus Frequency



Type 273
Rated Current Versus Frequency



Type 272 (CM 71)
Rated Current Versus Frequency



High-Voltage Types Ordering Information, Mica Capacitors

Ordering Information

Ordering Information: Order by complete part number, as below. For other options, write your requirements on your quote request or purchase order.

Cast-Case Part Numbering System



| | Temp. Coeff. ppm/°C | Capacitance Drift | Standard Cap. Range |
|----------|------------------------|-------------------|---------------------|
| B | Not specified | Not specified | |
| C | -200 to +200 | ±(0.5% +0.1pF) | 1-18 pF |
| D | -100 to +100 | ±(0.3% +0.1pF) | |
| E | - 20 to +100 | ±(0.1% +0.1pF) | 20-82 pF |

Specifications

Capacitance is within tolerance when measured at these frequencies:

- 1–1000 pF @ 1 MHz
- > 1000 pF @ 1 kHz

Dissipation Factor is typically less than 0.05% when measured as above. Dissipation factor (DF) equals $2\pi fRC$, where f is the test frequency, R is the equivalent series resistance (Ω), and C is nominal capacitance (F). Q is the reciprocal of the dissipation factor.

Operating Temperature Range is $-55\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$. Insulation Resistance is no less than $7500\text{ M}\Omega$ when measured at 100 Vdc.

Temperature Coefficient and Capacitance Drift: Measure the capacitors' capacitance at $25\text{ }^{\circ}\text{C}$, $55\text{ }^{\circ}\text{C}$, $25\text{ }^{\circ}\text{C}$, $125\text{ }^{\circ}\text{C}$, and at $25\text{ }^{\circ}\text{C}$ after stabilizing at each temperature. The capacitance will meet the limits of the Characteristic table shown in Ordering Information.

Rated Peak Voltage is not to be exceeded in actual use. Voltage ratings are in the listings and apply under the following conditions:

- Temperature: Within the specified operating temperature range.
- Altitude: Up to 50,000 feet or 3.4 inches of mercury.
- Relative Humidity: Up to 80%.
- Frequency: As specified.
- Where pulse conditions are encountered, contact us.

Withstanding Voltage: Capacitors will withstand application of an ac potential between terminals having an rms value equal to the rated peak voltage at a frequency of 100 Hz or less without damage, arcing or breakdown. Apply the potential by raising the voltage from zero to the specified value. Apply the full potential for a minimum of 5 seconds.

Case Insulation: Capacitor cases will withstand, without damage, arcing or breakdown, a 60-Hz peak ac potential equal to twice the rated peak voltage applied between the terminals connected together and a metal electrode touching the case. Apply this potential for 1 to 5 seconds.

Current Ratings at various frequencies are in the listings and apply under the following conditions:

- Temperature: $65\text{ }^{\circ}\text{C}$ maximum
- Derating Factor: None

Vibration: Capacitors will withstand vibrational forces occurring at rates of from 10 to 55 Hz for $4\frac{1}{2}$ hours. The total excursion during vibration is 0.06 inches. At the end of this period, make the following inspections and tests:

Visual and Mechanical Inspection: No perceptible deterioration. Withstanding Voltage: As specified under Withstanding Voltage.

Insulation Resistance: No less than $7500\text{ M}\Omega$.

Capacitance Change: Not to exceed 3% of the nominal value or one picofarad, whichever is greater.

Temperature and Immersion Cycling: Capacitors will withstand the temperature and immersion cycles indicated in the tables below. Follow three temperature cycles by two immersion cycles. Make the measurements listed below no more than 30 minutes following the final immersion cycle:

Withstanding Voltage: As specified under Withstanding Voltage.

Insulation Resistance: No less than $7500\text{ M}\Omega$.

Capacitance: Change not to exceed 4% of the nominal value or one picofarad, whichever is greater.

Temperature Cycling Test Conditions

| Steps | Temp (°C) | Interval (Minutes) |
|-------|-------------------|--------------------|
| 1 | $-55 + 0$ -3 | 30 |
| 2 | $25 + 10$ -5 | 10 to 15 |
| 3 | $125 + 3$ -0 | 30 |
| 4 | $25 + 10$ -5 | 10 to 15 |

Immersion Test Conditions

- Number of cycles: 2
- Duration of each immersion: 15 minutes
- Immersion bath: Saturated solution of sodium chloride and water
- Temp. of hot bath: $65 - 0 + 5\text{ }^{\circ}\text{C}$
- Temp. of cold bath: $25 - 0 + 10\text{ }^{\circ}\text{C}$

Life Test: Subject all capacitors to a temperature of $55\text{ }^{\circ}\text{C}$ for 48 hours. Then subject units cast in rectangular cases (Types 271, 272, and 273) to a 60-Hz rms voltage equal to the rated peak voltage for 250 hours. Subject units cast in cylindrical cases (Types 291, 292, 293, and 294) to a 60-Hz rms voltage equal to 90% of the rated peak voltage for 250 hours. In both tests, maintain the temperature at $125\text{ }^{\circ}\text{C}$. After test, the capacitors will meet these requirements:

Withstanding Voltage: As specified under Withstanding Voltage.

Insulation Resistance: No less than $7500\text{ M}\Omega$.

Capacitance Change: Within the limits given in the table below or one picofarad, whichever is greater.

Characteristic Maximum Cap.

| | |
|----------|-----------|
| B | $\pm 8\%$ |
| C | $\pm 3\%$ |
| D | $\pm 3\%$ |
| E | $\pm 3\%$ |

In addition, the capacitor must show no visual damage and the markings must be legible.

High-Voltage Types **Application Guide, Transmitting Mica**

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.