



Glass Capacitors

CYR10, 15 (Established Reliability)

M23269/01, 02 (QPL to MIL-PRF-23269)

FAILURE RATE LEVELS M AND S

APPLICATIONS

These precision glass dielectric capacitors are QPL to Established Reliability specification MIL-PRF-23269. Fused monolithic construction provides excellent electrical performance, environmental immunity, stability and retraceability. These capacitors have axial leads.

PERFORMANCE CHARACTERISTICS

Temperature Coefficient: +140 ±25 ppm/°C from -55°C to +125°C. TC of all units will track and retrace to within ±5 ppm.

Life: At rated conditions (100% rated voltage, 125°C), capacitance change is less than:

- ±0.5% after 2,000 hours
- ±2.0% after 30,000 hours

At accelerated conditions (150% rated voltage, 125°C), capacitance change is less than:

- ±0.5% after 2,000 hours
- ±2.0% after 6,000 hours

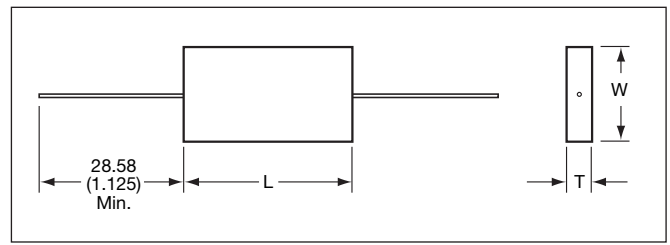
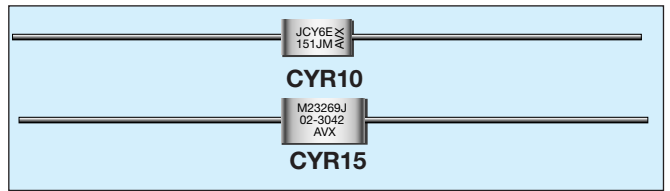
Insulation Resistance: A minimum of 100,000 megohms at 25°C and 10,000 megohms at 125°C.

Voltage/Temperature Rating: Voltage ratings are shown in the part number tables. The operating temperature range is -55°C to +125°C.

Radiation Resistance: The unique materials and construction techniques involved with glass capacitors make them ideal for use in radiation environments. After a total dose of nearly 10⁸ rads (H₂O) glass capacitors exhibit only a minor change in capacitance (≤.5%) and an 8% change in dissipation factor. Furthermore, glass capacitors can operate in fast neutron flux environments of 10¹⁵ N cm⁻²sec⁻¹ and experience little or no damage in component parameters.

Voltage Coefficient: Zero.

Additional performance details are given in the AVX "Performance Characteristics of Multilayer Glass Dielectric Capacitors" technical paper.



DIMENSIONS: millimeters (inches)

| Case Size | L | W | T | Lead Dia. +0.1(+0.004) -0.03(±0.001) |
|-----------|---------------------------------|-------------------------------|--------------------------------|--------------------------------------|
| CYR10 | 8.74 ± 1.19 (0.344 ± 0.047) | 4.37 ± .79 (0.172 ± 0.031) | 1.98 ± .79 (0.078 ± 0.031) | .51 (0.020) |
| CYR15 | 11.91 ± 1.19 (0.469 ± 0.047) | 6.76 ± .79 (0.266 ± 0.031) | 2.77 ± 1.19 (0.109 ± 0.047) | .51 (0.020) |

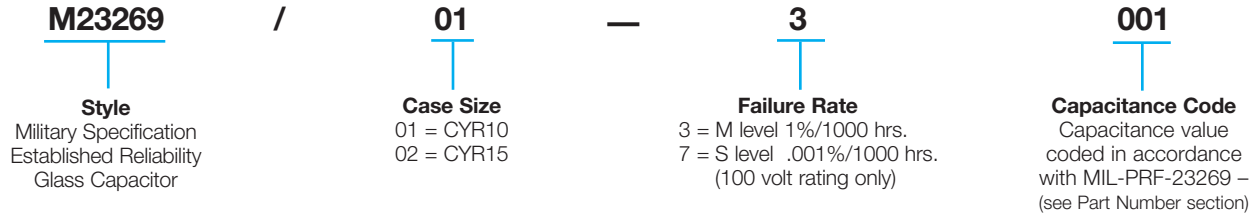
Note: Standard leads are solder-coated Dumet.



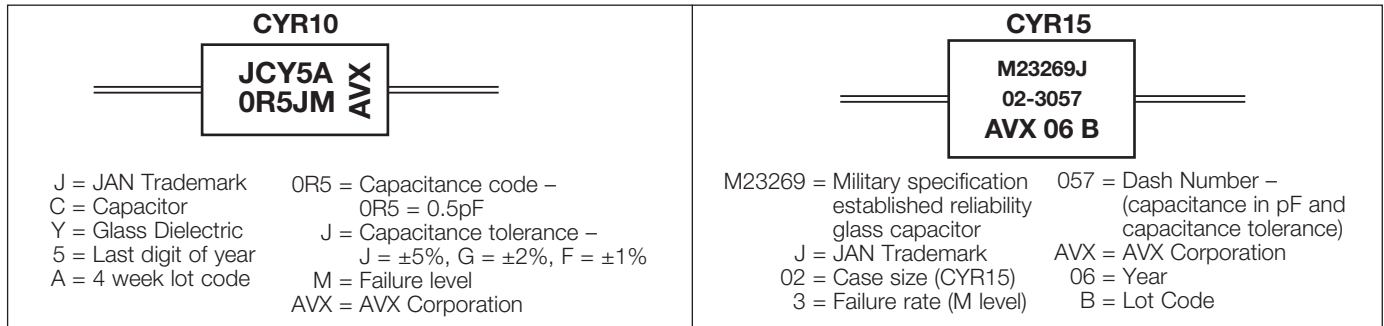
Glass Capacitors

Part Numbers and Ordering Information

HOW TO ORDER



MARKING



RATINGS & PART NUMBER REFERENCE

| Cap. Value (pF) | Part Number* Capacitance Tolerance | | |
|------------------|------------------------------------|-------|-------|
| CYR10 M23269/01- | | | |
| 500 Volts** | ±.25pF | ±.5pF | ±5% |
| .5 | * 001 | — | — |
| 1.0 | 002 | — | — |
| 1.5 | 003 | — | — |
| 2.2 | 004 | + 005 | — |
| 2.7 | 006 | — | — |
| 3.0 | 007 | 008 | — |
| 3.3 | 009 | — | — |
| 3.6 | 010 | 011 | — |
| 3.9 | 012 | — | — |
| 4.3 | 013 | 014 | — |
| 4.7 | 015 | — | — |
| 5.1 | 016 | — | — |
| 5.6 | 017 | — | * 018 |
| 6.2 | 019 | — | 020 |
| 6.8 | 021 | — | 022 |
| 7.5 | 023 | — | 024 |
| 8.2 | 025 | — | 026 |
| 9.1 | 027 | — | 028 |
| 10 | 029 | — | 030 |
| 11 | 031 | — | 032 |
| 12 | 033 | — | 034 |
| | ±1% | ±2% | ±5% |
| 13 | — | * 035 | * 036 |
| 15 | — | 037 | 038 |
| 16 | — | 039 | 040 |
| 18 | — | 041 | 042 |
| 20 | — | 043 | 044 |
| 22 | — | 045 | 046 |
| 24 | — | 047 | 048 |
| 27 | * 049 | 050 | 051 |
| 30 | 052 | 053 | 054 |
| 33 | 055 | 056 | 057 |
| 36 | 058 | 059 | 060 |
| 39 | 061 | 062 | 063 |
| 43 | 064 | 065 | 066 |
| 47 | 067 | 068 | 069 |
| 51 | 070 | 071 | 072 |
| 56 | 073 | 074 | 075 |
| 62 | 076 | 077 | 078 |

* Add first digit to indicate failure rate.
 ** S LEVEL = 100V rating for all values.

| Cap. Value (pF) | Part Number* Capacitance Tolerance | | |
|----------------------------|------------------------------------|-------|-------|
| CYR10 M23269/01- (cont'd.) | | | |
| 500 Volts** | ±1% | ±2% | ±5% |
| 68 | * 079 | * 080 | * 081 |
| 75 | 082 | 083 | 084 |
| 82 | 085 | 086 | 087 |
| 91 | 088 | 089 | 090 |
| 100 | 091 | 092 | 093 |
| 110 | 094 | 095 | 096 |
| 120 | 097 | 098 | 099 |
| 130 | 100 | 101 | 102 |
| 150 | 103 | 104 | 105 |
| 160 | 106 | 107 | 108 |
| 180 | 109 | 110 | 111 |
| 200 | 112 | 113 | 114 |
| 300 Volts** | ±1% | ±2% | ±5% |
| 220 | 115 | 116 | 117 |
| 240 | 118 | 119 | 120 |
| 270 | 121 | 122 | 123 |
| 300 | 124 | 125 | 126 |
| CYR15 M23269/02- | | | |
| 500 Volts** | ±1% | ±2% | ±5% |
| 220 | * 001 | * 002 | * 003 |
| 240 | 004 | 005 | 006 |
| 270 | 007 | 008 | 009 |
| 300 | 010 | 011 | 012 |
| 330 | 013 | 014 | 015 |
| 360 | 016 | 017 | 018 |
| 390 | 019 | 020 | 021 |
| 430 | 022 | 023 | 024 |
| 470 | 025 | 026 | 027 |
| 510 | 028 | 029 | 030 |
| 300 Volts** | ±1% | ±2% | ±5% |
| 560 | 031 | 032 | 033 |
| 620 | 034 | 035 | 036 |
| 680 | 037 | 038 | 039 |
| 750 | 040 | 041 | 042 |
| 820 | 043 | 044 | 045 |
| 910 | 046 | 047 | 048 |
| 1,000 | 049 | 050 | 051 |
| 1,100 | 052 | 053 | 054 |
| 1,200 | 055 | 056 | 057 |

* Add first digit to indicate failure rate.
 ** S LEVEL = 100V rating for all values.