

### Features

- Capacitance Range: 100pF to 5.6μF
- Operating Temperature Range: -55°C to 125°C
- Voltage Range: 1kV to 10kV
- Intermediate and Higher Voltages are Available
- High Reliability Long Life
- Conformal Coated

VXC series is high voltage radial lead multilayer ceramic capacitors for use in high reliability commercial and industrial applications. These capacitors are designed

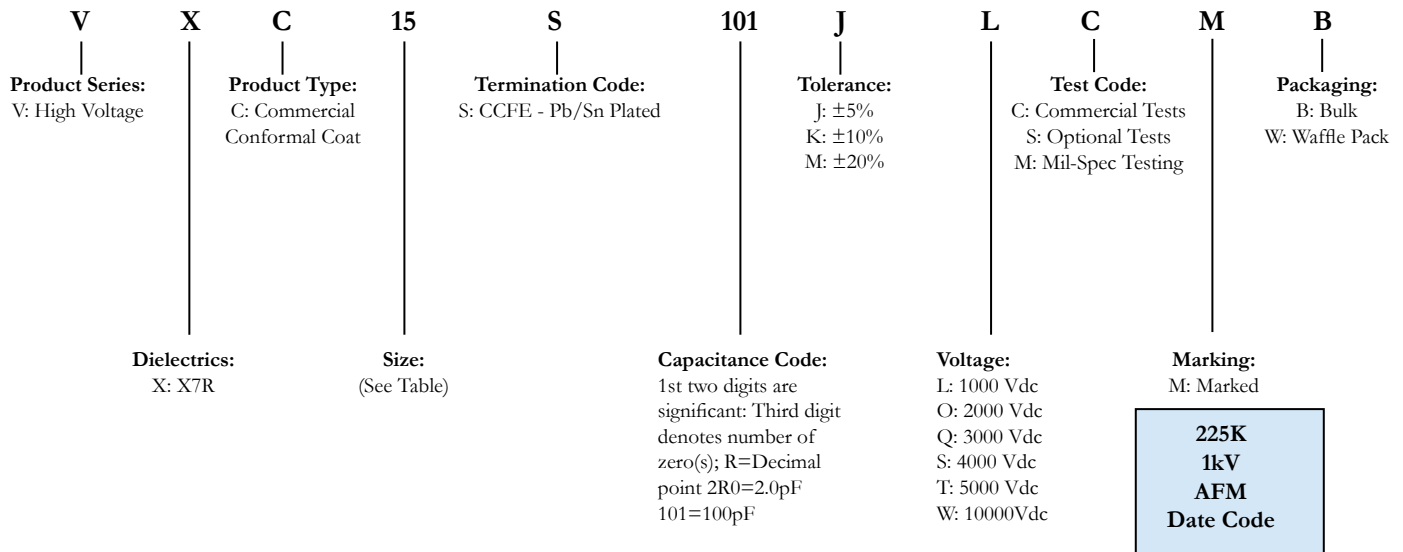
using a high density barium titanate ceramic, having temperature coefficients meeting X7R standards. These capacitors conform to or exceed design guidelines outlined in DSCC and other MIL drawings and standards. Each capacitor is 100% tested physically and electrically. Group A and Group B Inspections, as well as partial discharge, SLAM and CSAM are available as options.



### Application

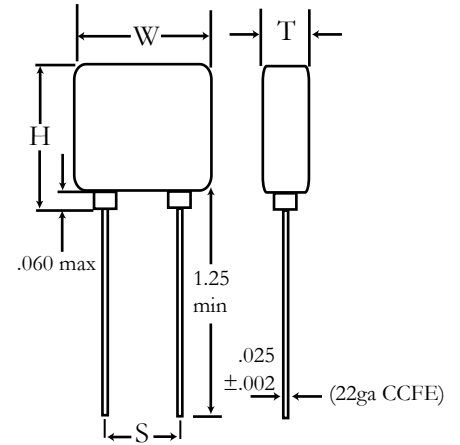
Typical applications include high voltage power supplies, voltage multipliers, surge protection and other custom applications.

### AFM Part Number Code



### Size Information

| Style | Sizes (Max) Inches (mm) |              |               | Lead Spacing<br>±0.30 (S) |
|-------|-------------------------|--------------|---------------|---------------------------|
|       | Width (W)               | Height (H)   | Thickness (T) |                           |
| 15    | .250 (6.35)             | .220 (5.59)  | .200 (5.08)   | .170 (4.32)               |
| 20    | .320 (8.13)             | .280 (7.11)  | .250 (6.35)   | .220 (5.59)               |
| 22    | .370 (9.40)             | .300 (7.62)  | .250 (6.35)   | .275 (6.99)               |
| 30    | .450 (11.43)            | .220 (5.59)  | .200 (5.08)   | .300 (7.62)               |
| 35    | .470 (11.94)            | .400 (10.16) | .270 (6.86)   | .375 (9.53)               |
| 41    | .550 (13.97)            | .280 (7.11)  | .250 (6.35)   | .400 (10.16)              |
| 45    | .570 (14.48)            | .500 (12.70) | .270 (6.86)   | .475 (12.07)              |
| 55    | .670 (17.02)            | .600 (15.24) | .270 (6.86)   | .575 (14.61)              |
| 65    | .770 (19.56)            | .720 (18.29) | .270 (6.86)   | .675 (17.15)              |
| 70    | .850 (21.59)            | .400 (10.16) | .270 (6.86)   | .700 (17.78)              |
| 90    | 1.05 (26.27)            | .500 (12.70) | .270 (6.86)   | .975 (24.77)              |
| 95    | 1.25 (31.75)            | .600 (15.24) | .270 (6.86)   | 1.175 (29.85)             |
| 99    | 1.45 (36.83)            | .720 (18.29) | .270 (6.86)   | 1.375 (34.93)             |



### X7R Capacitance Range

| Style | 500V   |        | 1kV    |        | 2kV    |        | 3kV    |        | 4kV    |        | 5kV    |        | 10kV   |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|       | Min    | Max    | Min    | Max    | Min    | Max    | Min    | Max    | Min    | Max    | Min    | Max    | Min    | Max    |
| 15    | 680pF  | .082µF | 680pF  | .022µF | 270pF  | 3900pF | 100pF  | 1200pF |        |        |        |        |        |        |
| 20    | 1200pF | .180µF | 1200pF | .068µF | 560pF  | .012µF | 560pF  | 3900pF |        |        |        |        |        |        |
| 22    | 1200pF | .220µF | 1200pF | .082µF | 680pF  | .018µF | 680pF  | 5600pF |        |        |        |        |        |        |
| 30    | 1800pF | .220µF | 1800pF | .056µF | 390pF  | 8200pF | 390pF  | 2200pF | 150pF  | 1200pF |        |        |        |        |
| 35    | 3300pF | .560µF | 3300pF | .270µF | 1200pF | .033µF | 1200pF | .015µF | 270pF  | 6800pF |        |        |        |        |
| 41    | 2700pF | .390µF | 2700pF | .150µF | 680pF  | .022µF | 680pF  | 8200pF | 270pF  | 4700pF | 270pF  | 2700pF |        |        |
| 45    | 6800pF | 1.20µF | 6800pF | .470µF | 2700pF | .068µF | 2700pF | .033µF | 470pF  | .010µF | 470pF  | 6800pF |        |        |
| 55    | .010µF | 1.80µF | .010µF | .680µF | 3900pF | .100µF | 3900pF | .039µF | 680pF  | .015µF | 680pF  | .010µF |        |        |
| 65    | .015µF | 2.50µF | .015µF | 1.00µF | 6800pF | .180µF | 6800pF | .082µF | 1200pF | .027µF | 1000pF | .015µF | 270pF  | 1200pF |
| 70    | .010µF | 1.50µF | .010µF | .680µF | 1800pF | .082µF | 1800pF | .027µF | 680pF  | .012µF | 680pF  | 8200pF | 150pF  | 1000pF |
| 90    | .012µF | 2.20µF | .012µF | 1.00µF | 3300pF | .150µF | 3300pF | .056µF | 1200pF | .027µF | 1000pF | .022µF | 470pF  | 3900pF |
| 95    | .018µF | 3.90µF | .018µF | 1.5µF  | 5600pF | .250µF | 5600pF | .082µF | 2200pF | .047µF | 2000pF | .027µF | 820pF  | 5600pF |
| 99    | .027µF | 5.60µF | .027µF | 2.20µF | 8200pF | .390µF | 8200pF | .120µF | 3300pF | .068µF | 3000pF | .039µF | 1000pF | .010µF |

### Specification and Performance

|   |   |
|---|---|
| Piezoelectric and Aging Effects:              | None  |
| Temperature Range:                            | -55°C to +200°C   |
| Temperature Coefficient of Capacitance:       | ±15%  |
| Insulation Resistance (IR, at Rated Voltage): | 25°C > 100,000 MΩ or 1000 MΩµF; 125°C > 10,000 MΩ or 100 MΩµF Whichever is less |
| Dielectric Withstand Voltage (DWV):           | 500V to 10kV - 1.2 x V Rated at 25°C  |
| Dissipation Factor:                           | 2.5% max  |