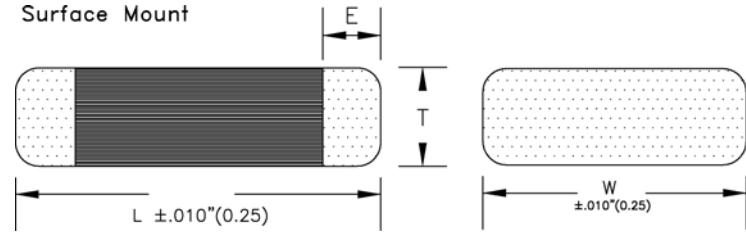


FEATURES

- Designed for RF communication applications.
- Ultra Low ESR.
- T/C IS NPO (COG).
- CMCS capacitors are available in four sizes:
25 Volts = 0402 size
50 Volts = 0603 size
100 Volts = 0603, 0805, & 1210 sizes
200 Volts = 0603, 0805, & 1210 sizes.
- Temperature Coefficient
0ppm \pm 30 ppm/ $^{\circ}$ C (-55 $^{\circ}$ C ~ +125 $^{\circ}$ C) NPO.
- Insulation Resistance:
1000000M Ω minimum @ 25 $^{\circ}$ C, rated voltage.
100000M Ω minimum @ 125 $^{\circ}$ C, rated voltage.



PART NUMBERING

| Part Number Example: CMCS-100/101KN0805TF | | | | | | | | | |
|--|---|------------------|---|------------------------|----------------|-----------------------|-----------|-----------------|----------------|
| CMCS | - | 100 | / | 101 | K | N | 0805 | T | F |
| Type | | Rated DC Voltage | | Capacitance Code (pF)* | Tolerance Code | Dielectric Material** | Case Size | Package Code*** | RoHs Compliant |
| * Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros). | | | | | | | | | |
| ** Dielectric Material: N = NPO. | | | | | | | | | |
| *** Package Code: T = 7" Tape & Reel, T13 = 13" Tape & Reel, W = Waffle. | | | | | | | | | |

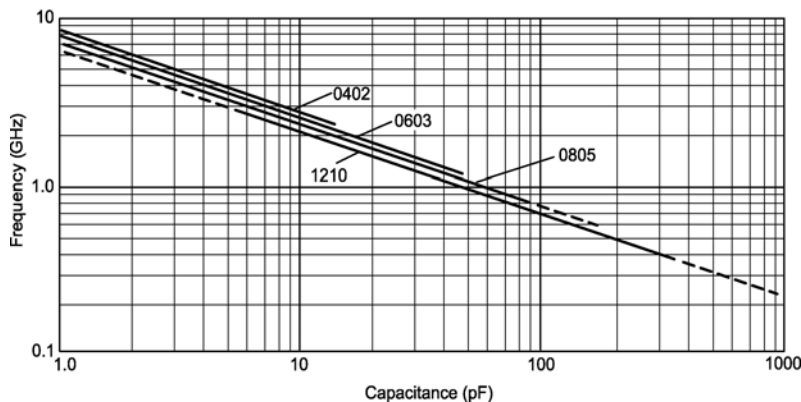
DIMENSIONS (INCHES (mm))

| EIA | 0402 | 0603 | 0805 | 1210 |
|-------------|------------------------------|-------------------------------|--------------------------------|--------------------------------|
| Length Max. | 0.039(1.0) | 0.06(1.50) | 0.080(2.03) | 0.125(3.18) |
| Width Max. | 0.024(0.60) | 0.03(0.75) | 0.050(1.25) | 0.095(2.41) |
| Max. T | 0.02(0.50) | 0.035(0.90) | 0.050(1.25) | 0.065(1.65) |
| Term. Band | 0.01(0.25) \pm 0.005(0.13) | 0.010(0.25) \pm 0.005(0.13) | 0.020(0.508) \pm 0.010(0.25) | 0.020(0.508) \pm 0.010(0.25) |

RATINGS

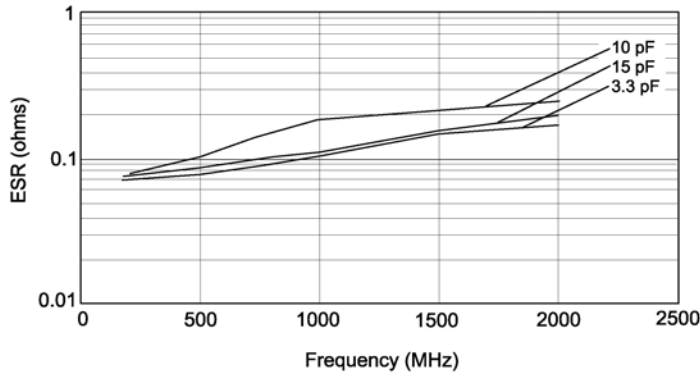
| Size | WVDC | | | |
|------|--------------|--------------|----------------|---------------|
| | 25 | 50 | 100 | 200 |
| 0402 | 0.2pF ~ 15pF | | | |
| 0603 | | 51pF ~ 100pF | 20pF ~ 47pF | 1pF ~ 18pF |
| 0805 | | | 100pF ~ 150pF | 1.5pF ~ 120pF |
| 1210 | | | 470pF ~ 1000pF | 2.2pF ~ 430pF |

TYPICAL SERIES RESONANT FREQUENCY

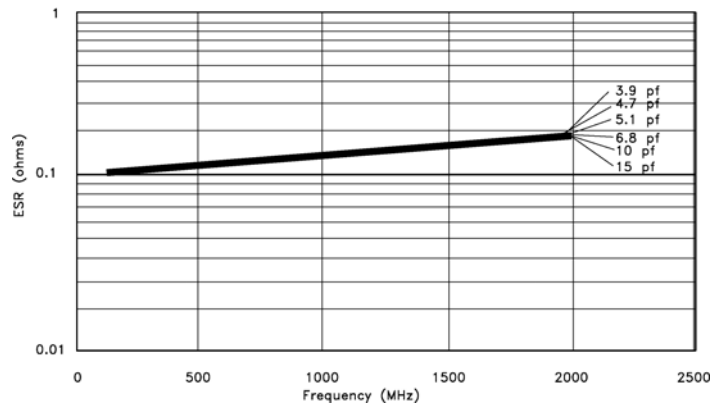


| Code | Cap. Tolerance |
|------|----------------|
| B | \pm 0.1pF |
| C | \pm 0.25pF |
| D | \pm 0.5pF |
| F | \pm 1% |
| G | \pm 2% |
| J | \pm 5% |
| K | \pm 10% |
| M | \pm 20% |

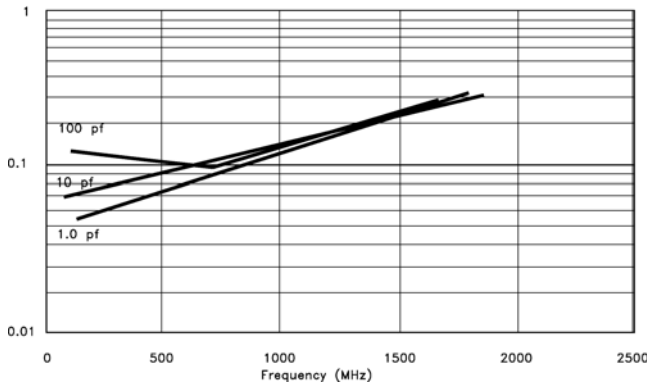
TYPICAL ESR vs. FREQUENCY
0402



TYPICAL ESR vs FREQUENCY (0603)



TYPICAL ESR vs FREQUENCY (0805)



TYPICAL ESR vs FREQUENCY (1210)

