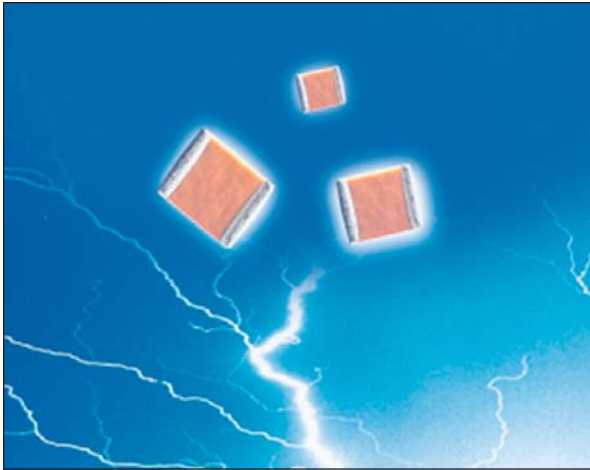


ESD-Safe™ MLC Chips



ESD Withstanding MLC Capacitor



The ESD-Safe™ series is an enhanced MLC capacitor developed and designed specifically to be used in ESD (Electro Static Discharge) prone applications.

ESD-Safe™ capacitors are commonly utilized on the I/O pins of modules and systems connected to a wiring harness. These devices average the electrical potential of two objects due to ESD charging.

ESD-Safe™ capacitors are offered in a wide capacitance value range so that the correct capacitance can be selected to minimize distortion on the circuit. ESD capacitors provide a method to integrate voltage differentials in low level transient fields.

HOW TO ORDER

| | | | | | | | | | | | | |
|--|---|---|-----------------------|--|---|--|---|--|-------------------------------------|----------|-----------|---|
| ESD | 5 | 5 | C | 104 | K | 4 | Z | 2 | A | - | 18 | |
| Product Type ESD Applications | Case Size 3 = 0603 5 = 0805 6 = 1206 | Voltage 3 = 25V 5 = 50V 1 = 100V | Dielectric X7R = C | Capacitance Code (In pF) 2 Sig. Digits + Number of Zeros e.g. 1000pF = 106 | Capacitance Tolerance J = ±5% K = ±10% M = ±20% | Failure Rate A = Commercial 4 = Automotive | Terminations T = 100% Sn Z = FLEXITERM® | Packaging 2 = 7" Reel 4 = 13" Reel | Special Code A = Std. Product | | | ESD rating (kV) 18 = 18kV 20 = 20kV 22 = 22kV 24 = 24kV 26 = 26kV 28 = 28kV 30 = 30kV |

ESD-SAFE X7R RANGE

| Capacitance | | 0603 | | 0805 | | | 1206 | | |
|-------------|----------|------|------|------|------|------|------|------|------|
| Code | Value | 50V | 100V | 25V | 50V | 100V | 25V | 50V | 100V |
| 472 | 4.7 (nF) | 18kV | 18kV | 18kV | 18kV | 18kV | 20kV | 20kV | 20kV |
| 682 | 6.8 | 18kV | 18kV | 18kV | 18kV | 18kV | 20kV | 20kV | 20kV |
| 103 | 10 | 18kV | 18kV | 18kV | 18kV | 18kV | 20kV | 20kV | 20kV |
| 153 | 15 | 20kV | | 20kV | 20kV | 20kV | 22kV | 22kV | 22kV |
| 223 | 22 | 20kV | | 22kV | 22kV | 22kV | 24kV | 24kV | 24kV |
| 333 | 33 | 20kV | | 22kV | 22kV | 22kV | 24kV | 24kV | 24kV |
| 473 | 47 | 22kV | | 22kV | 22kV | 22kV | 26kV | 26kV | 26kV |
| 683 | 68 | 22kV | | 24kV | 24kV | 24kV | 26kV | 26kV | 26kV |
| 104 | 100 | 24kV | | 24kV | 24kV | 24kV | 26kV | 26kV | 26kV |
| 154 | 150 | | | 24kV | 24kV | | 28kV | 28kV | 28kV |
| 224 | 220 | | | 26kV | 26kV | | 28kV | 28kV | 28kV |
| 334 | 330 | | | 26kV | 26kV | | 28kV | 28kV | 28kV |
| 474 | 470 | | | 26kV | 26kV | | 28kV | 28kV | 28kV |
| 684 | 680 | | | 26kV | | | 28kV | 28kV | |
| 105 | 1 (µF) | | | 26kV | | | 28kV | 28kV | |
| 155 | 1.5 | | | | | | 30kV | | |
| 225 | 2.2 | | | | | | 30kV | | |