M3 Medical Grade



Overview

KEMET's M3 Medical Grade series provides a broad offering of surface mount multilayer ceramic capacitors (MLCCs) for high reliability medical applications, including implantable devices, that require long term life and performance. By utilizing robust designs, along with strict process and material control, this series provides a high reliability solution necessary for a wide variety of critical medical applications. Each lot is traceable down to raw materials and undergoes enhanced in-process and end-of-line testing including lot acceptance. KEMET's M3 Medical Grade series provides a baseline specification, which can be adapted to customer specific requirements for critical medical applications.

KEMET's M3 Medical Grade series is available in C0G, X7R, and X5R dielectrics from EIA 0402 to 1210 case sizes with capacitance values ranging from 0.5 pF to 5.6 μ F. This series is available in voltage ratings up to 200 V, and is available in Sn, SnPb, and Au termination options.

The M3 series is available to customers willing to partner with KEMET to align application and performance requirements. For more information, please contact your local Sales Representative.

Benefits

- Custom testing and screening available upon request
- · Enhanced designs
- Lot traceability down to raw materials
- 100% voltage conditioning
- End of Line Screening
- · Lot acceptance testing data provided
- · COG, X7R, and X5R dielectrics
- Capacitance offerings ranging from 0.5 pF up to 5.6 μF
- EIA 0402 1210 case sizes
- DC voltage ratings of 6.3 V, 10 V, 16 V, 25 V, 50 V, 100 V, and 200 V
- Sn, SnPb, Au termination options
- Available capacitance tolerances of ±0.10 pF, ±0.25 pF, ±0.5 pF, ±1%, ±2%, ±5%, ±10%, and ±20%
- · Low ESR and Low ESL



Applications

Typical Applications May Include:

- Cardiac pacemakers
- · Neuromodulation devices
- Implantable cardioverter-defibrillator (ICD)
- · Heart pumps