

Murata Electronics Releases New KCM Series Metal Terminal Capacitors



Immune to PCB flexure for Automotive applications

Murata Electronics is proud to announce that it has created a series of chip monolithic ceramic capacitors which feature metal pins and which are designed to be used in automotive electronic devices.

In the automotive market, the automakers, stimulated by the increasing interest focused in recent years on tackling global environmental problems and energy problems, have been pushing hard to develop hybrid electric vehicles (HEV) and electric vehicles (EV) and promote their practical use.

When chip monolithic ceramic capacitors (MLCC) - and especially large ones - are used in the automotive electronic devices installed on these HEVs and EVs, they are easily affected by the stress of the expansion and contraction of the substrates generated by sharp temperature changes, and under conditions where they will be exposed to thermal shock^{*1} occurring over long periods of time, measures to deal with solder cracks are an absolute necessity. Similarly, measures to deal with cracks in the capacitor elements that form as a result of vibration and mechanical impact must also be taken, and the capacitors are required to exhibit a higher level of reliability than when they are used in general - purpose products. So providing the capacitors with metal pins that have an elastic action reduces the impact to which the capacitor elements are subjected.

Features :

- **High reliability for thermal & mechanical stress**
- **Space saving and high capacitance value by stacking two MLCC's**
- **RoHS Compliant**

Applications :

- **DC – DC Converters in automotive Engine Control Units (ECU)**

