



Vertical Layer MLCC

Wire-Bondable
Capacitors in Smallest
Case Sizes Available

Vertical layer capacitors are multi-layer ceramic capacitors (MLCC) oriented with their terminations at the top and bottom. They feature high-purity gold conductors ideal for wire bonding, soldering, or epoxy die attach. Quantic Eulex vertical layer capacitors are Class II dielectric and are available in a range of sizes suitable for IC packages and amplifier applications.

Specifications/Test Condition	Dielectric	
	X5R [D]	X7R [X]
Operating Temperature Range	-55°C to 85°C	-55°C to 125°C
Temperature Coefficient	±15%	±15%
Capacitance Test	1kHz @ 1VAC rms	1kHz @ 1VAC rms
Dissipation Factor	+10% Max	+5% Max
Insulation Resistance @ 25°C	≥500MΩ μF	≥1000MΩ μF
Dielectric Withstanding Voltage	250% WVDC	250% WVDC
Wire Bond Pull Strength (0.001" dia. Au wire)	3 grams min	3 grams min
Shear Strength	Size-Dependent	Size-Dependent

Humidity, temperature, and life test data are available on request.

Advantages

- High self-resonance frequencies
- Capacitance values up to 100nF
- Voltages to 100V
- Small case sizes from 1515 up
- Class II [-55°C to 125°C]
- Custom sizes available
- Roadmap for High Temperature to 300°C

Applications

DC Blocking over
a wide frequency
range

Filtering
Tuning

RF Bypass

Microwave



The bottom of the vertical layer capacitor is typically soldered or die attached to a circuit, and the top connection is made by wire-bond.



Download the
Vertical Layer MLCC
Data Sheet and
Selection Guide.



Quantic™ Eulex

Quantic Eulex develops innovative ceramic components for the most demanding high frequency microwave, millimeter-wave, and 5G applications. Quantic Eulex solutions deliver design advantages through small-footprint, low profiling packaging, and a wide voltage range— fully tested up to 67 GHz with a roadmap planned from 6.5 to 100 GHz. The reliability of Quantic Eulex capacitors is well established at temperatures ranging from -55°C to +125°C. Monterey Park, CA | 323.266.6603 | info@quanticeulex.com | quanticeulex.com