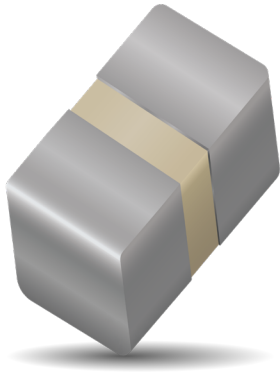


# RF/Microwave Capacitors

## RF/Microwave Multilayer Capacitors (MLC)

### 530L Series Broadband Multilayer Capacitors



#### UBL TECHNOLOGY

KYOCERA AVX's new 530L Series Multilayer Broadband Capacitor provides low insertion loss performance over multiple octaves of frequency spectrum. The 530L capacitor is compatible with high speed automated pick and place SMT manufacturing. The 530L is ideal for broadband DC blocking, coupling, bypassing, and feedback applications in optical communications systems and equipment using high-speed digital.

#### FEATURES

- EIA 0402 Case Size
- Operating Frequency 16 KHz to 18 GHz
- Insertion Loss: 1 dB max.
- Low Loss X7R Dielectric
- RoHS Compliant Terminations
- Solderable SMT Terminations

#### ADVANTAGES

- Broadband Performance
- Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss through 18 GHz
- Unit-to-Unit Performance
- Repeatability
- Rugged Ceramic Construction

#### HOW TO ORDER

<b>530</b>	<b>L</b>	<b>10</b>	<b>4</b>	<b>K</b>	<b>T</b>	<b>16</b>	<b>T</b>
<b>Series</b>	<b>Case Size</b> 0402	<b>Capacitance Code</b> First 2 significant digits for capacitance	Indicates number of zeros following digits of capacitance in pF	<b>Capacitance Tolerance</b>	<b>Termination Code</b> T = Tin Plated over Nickel Barrier. RoHS Compliant	<b>WVDC</b>	<b>Packaging (Tape and Reel)</b> T = 500 pcs T1K = 1,000 pcs T10K = 10,000pcs

The above part number refers to a 530 Series (case size L) 100 nF capacitor, K tolerance ( $\pm 10\%$ ), with T termination (tin plated over nickel barrier, RoHS compliant), 16 WVDC, tape and reel packaging.

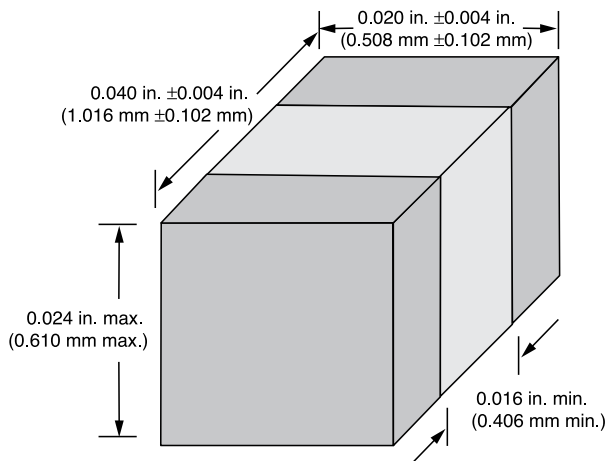


Tape & Reel



RoHS COMPLIANT

#### DIMENSIONS



**RF/Microwave Capacitors**  
**RF/Microwave Multilayer Capacitors (MLC)**  
**530L Series Broadband Multilayer Capacitors**

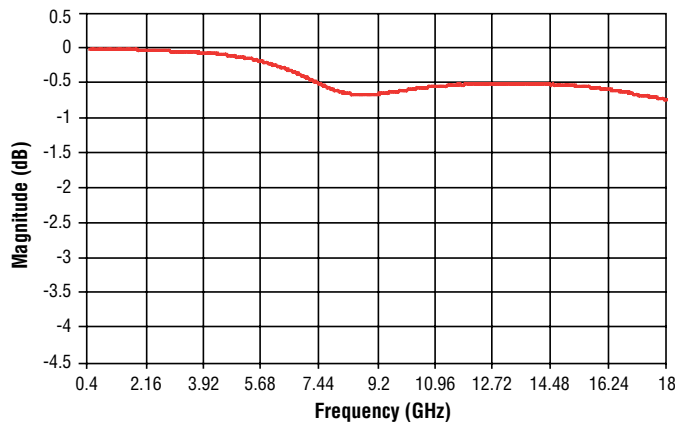


**ELECTRICAL SPECIFICATIONS**

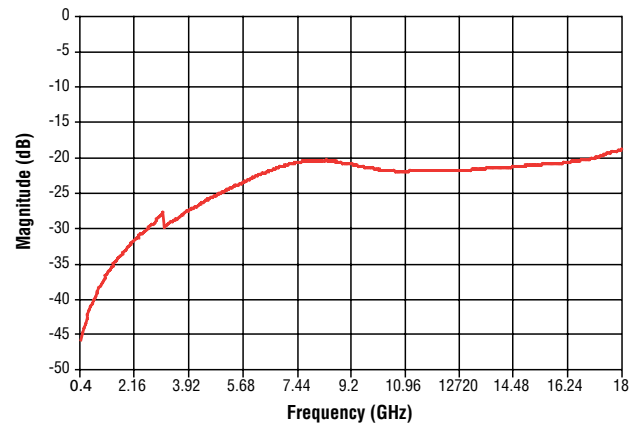
<b>Capacitance</b>	100 nF
<b>Rated Voltage</b>	16 WVDC
<b>Dielectric Withstanding Voltage (DWV)</b>	250% of rated WVDC for 5 secs.
<b>Operating Temperature Range</b>	-55°C to +125°C
<b>Temperature Coefficient of Capacitance (TCC)</b>	±15% (-55°C to +125°C)
<b>Maximum DF</b>	10% @ 1KHz
<b>Insulation Resistance</b>	10 <sup>8</sup> Ω min. @ +25°C @ rated WVDC 10 <sup>7</sup> Ω min. @ +125°C @ rated WVDC

**PERFORMANCE DATA**

**530L Insertion Loss (S21)**



**530L Return Loss (S11)**



**530L Data Sheet Test Condition Description**

All testing performed on 10-mil-thick Rogers RO4350 microstrip board, with the UUT subtending a 24 mil gap in a 22-mil-wide center trace (nominal 50-ohm characteristic impedance). Measurements were made using an Anritsu 3680K Universal Test Fixture and an HP8722D Vector Network Analyzer having a four receiver architecture. Measurements have been de-embedded to the edges of the UUT using a standard TRL calibration procedure.