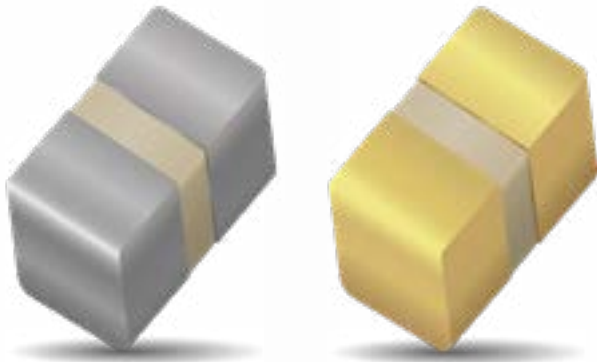


RF/Microwave Capacitors

RF/Microwave Multilayer Capacitors (MLC)

550L Series UBC™ Ultra-Broadband Capacitor



FEATURES

- 0402 Case Size
- Capacitance: 100 nF
- Operating Frequency: 16 KHz (-3 dB roll-off) to 70+ GHz*
- Insertion Loss: <0.5 dB typical
- Orientation-insensitive
- One Piece Construction
- Voltage Rating: 16 WVDC
- RoHS Compliant Terminations
- Gold Termination Available

* 25°C, no bias applied

GENERAL DESCRIPTION

KYOCERA AVX new 550L Ultra-Broadband Capacitor is manufactured with highest quality materials to provide reliable and repeatable Ultra-Broadband performance from 16 KHz through 70+ GHz. It exhibits ultra-low insertion loss, flat frequency response and excellent return loss, and is ideal for D.C. Blocking, Coupling, Bypassing and Feedback applications requiring Ultra-Broadband performance.

The 550L is a one-piece orientation-insensitive 0402 SMT package, fully compatible with high speed automated pick-and-place manufacturing. It is designed to meet the most stringent requirements of Ultra-Broadband applications.

ADVANTAGES

- Ultra-Broadband performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss
- Unit-to-Unit Performance Repeatability
- Rugged Ceramic Construction

TYPICAL CIRCUIT APPLICATIONS

- Optoelectronics/High Speed Data
- Transimpedance amplifiers
- Receive and Transmit Optical Sub-Assembly (ROSA/TOSA)
- Synchronous Optical Network (SONET)
- Broadband test equipment
- Broadband Microwave/Millimeter Wave

ELECTRICAL SPECIFICATIONS

Capacitance	100 nF
Rated Voltage	16 WVDC from -55°C to +125°C
Dielectric Withstanding Voltage	250% of rated WVDC for 5 secs.
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient of Capacitance	±15% (-55°C to +85°C), ±22% (-55°C to +125°C)
Insulation Resistance	10 ⁸ Ω min. @ +25°C @ rated WVDC 10 ⁷ Ω min. @ +125°C @ rated WVDC

PACKAGING OPTIONS

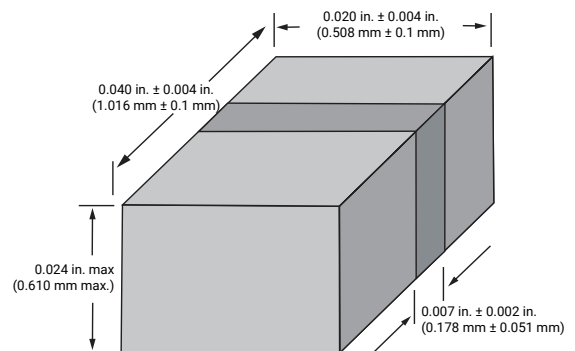


Tape & Reel



RoHS
COMPLIANT

MECHANICAL DIMENSIONS



Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06

Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Россия (495)268-04-70

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Самара (846)206-03-16
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Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Казахстан (772)734-952-31

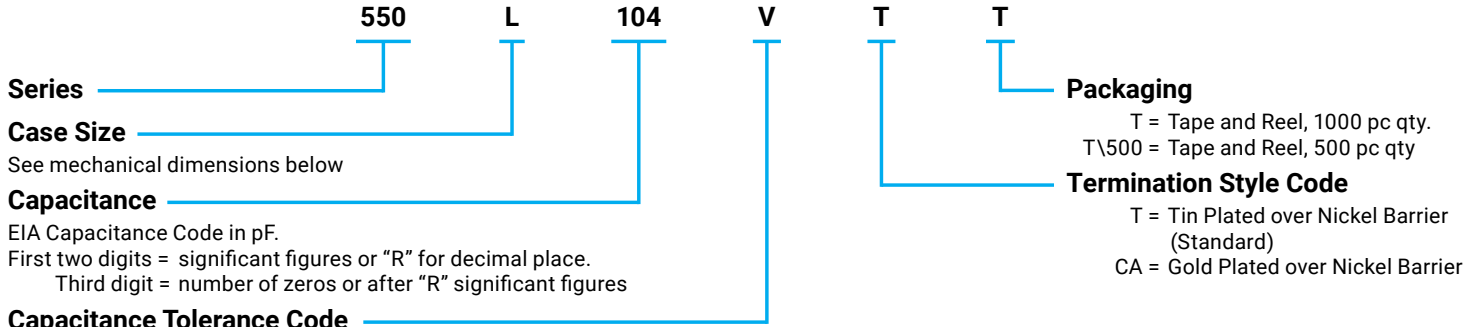
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

RF/Microwave Capacitors

RF/Microwave Multilayer Capacitors (MLC)

550L Series UBC™ Ultra-Broadband Capacitor

HOW TO ORDER

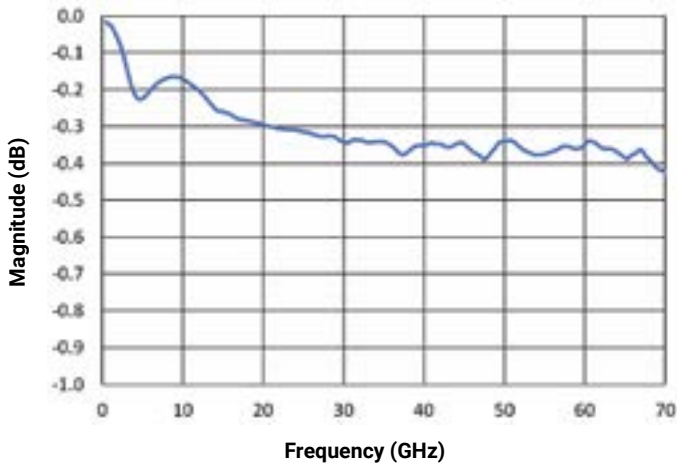


Code	K	V
Tol.	±10%	+ 20% -10%

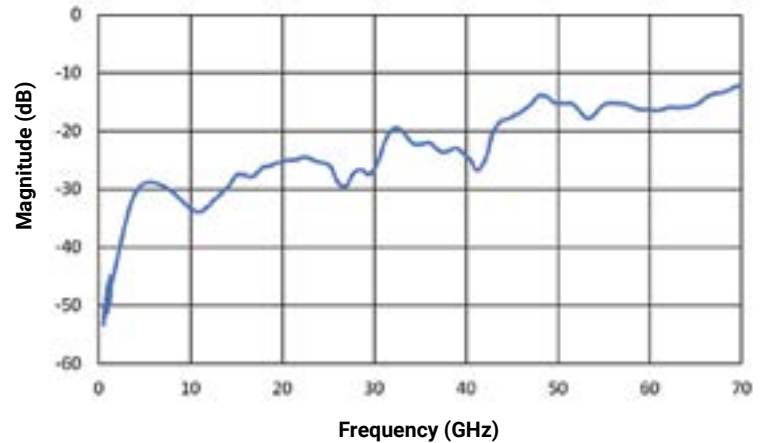
The above part number refers to a 550 Series (case size L) 100 nF capacitor, V Tolerance (+ 20% -10%), with T termination (Tin Plated over Nickel Barrier), tape and reel packaging.

PERFORMANCE DATA

550L Series Insertion Loss (S21)



550L Series Return Loss (S11)



550L Data Sheet Condition Description

The S-Parameter test was performed on Rogers RO4350B 10-mil thick substrate with a nominal impedance of 50 ohms. the board has a 10-mil gap at the center of a 22-mil wide ½ oz copper microstrip trace

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