

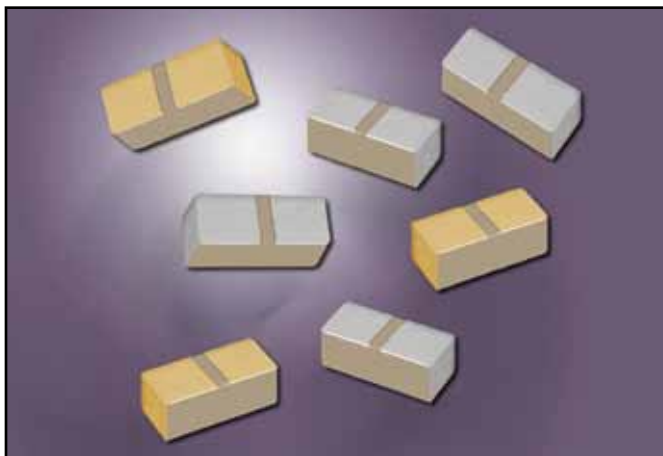
ATC 550U Series UBC™ Ultra-Broadband Capacitor

Features:

- 0301 Case Size
- Capacitance: 100 nF
- Operating Frequency:
16 KHz (-3 dB roll-off) to 40+ GHz*
- Insertion Loss: 0.4 dB typical
- One Piece Construction
- Voltage Rating: 6.3 WVDC
- RoHS Compliant Terminations
- Gold Terminations Available

ATC's new 550U Ultra-Broadband Capacitor is manufactured with highest quality materials to provide reliable and repeatable Ultra-Broadband performance from 16 KHz through 40+ 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 550U is a one-piece 0301 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

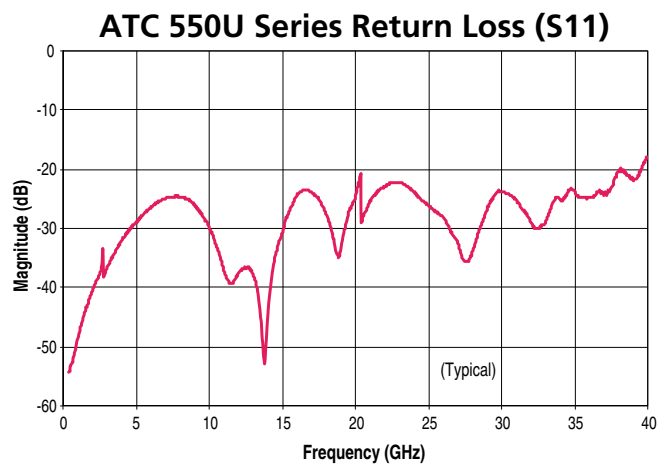
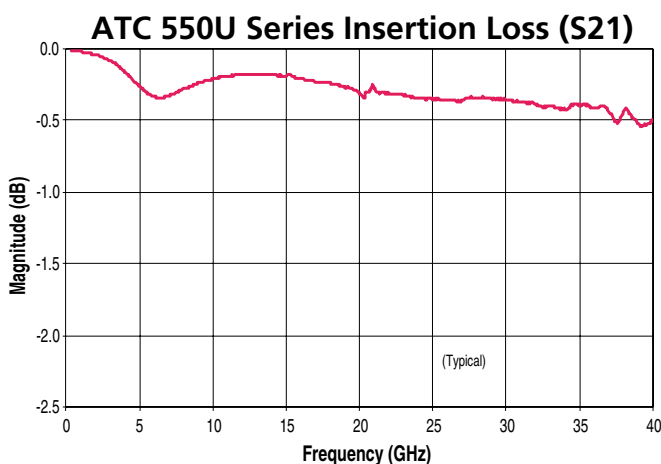
*25 °C, no bias applied

Applications:

- Optoelectronics/High Speed Data
- Transimpedance amplifiers
- ROSA/TOSA†
- SONENT††
- Broadband Test Equipment
- Broadband Microwave/millimeter-wave

†Receive and Transmit Optical Sub-Assembly

††Synchronous Optical Network



ATC 550U Data Sheet Test Condition Description

ATC testing to 40 GHz performed on 10-mil-thick Rogers RO3006 microstrip board, with the device under test subtending a 10 mil gap in a 13.4-mil-wide center trace (nominal 50-ohm characteristic impedance).



AMERICAN
ATC North America
sales@atceramics.com

TECHNICAL
ATC Europe
saleseur@atceramics.com

CERAMICS
ATC Asia
sales@atceramics-asia.com



ISO 9001 REGISTERED COMPANY

THE ENGINEERS' CHOICE™

www.atceramics.com

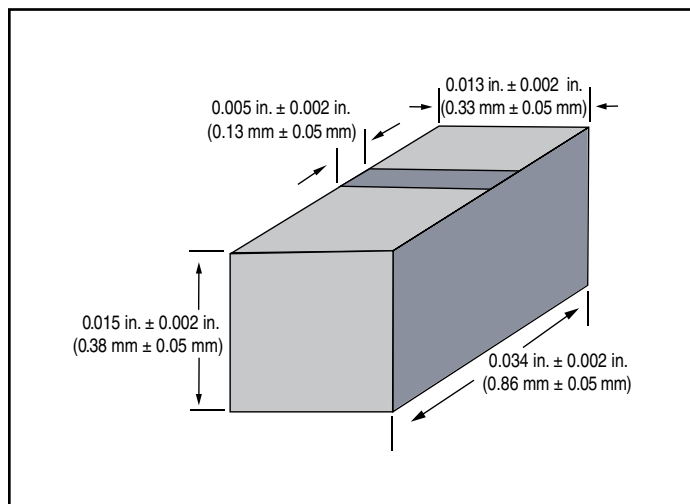
ATC # 001-1127
Rev. E; 5/14

ATC 550U SERIES UBC™ CAPACITORS

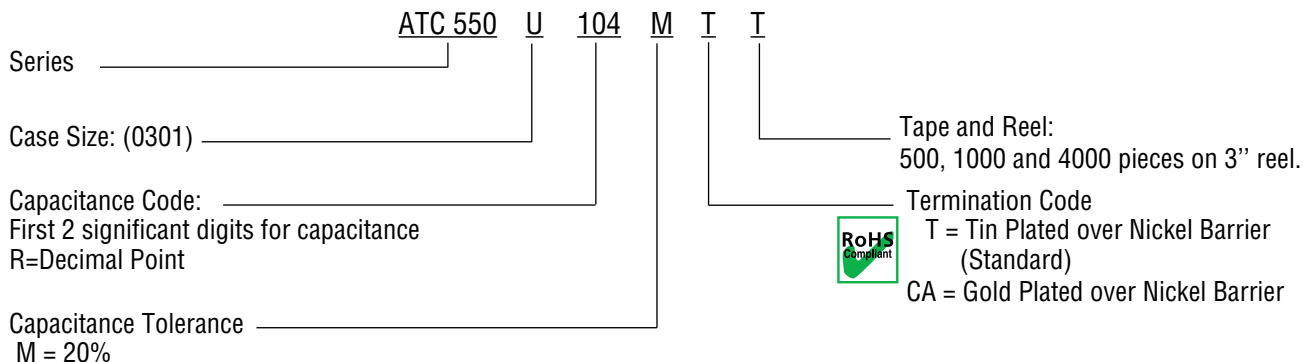
Electrical Specifications:

- Capacitance: 100 nF
- Rated Voltage: 6.3 WVDC
- Dielectric Withstanding Voltage (DWV): 250% of rated WVDC for 5 secs.
- Operating Temperature Range: -55°C to +85°C
- Temperature Coefficient of Capacitance (TCC): ±15%
- Insulation Resistance: 10¹⁰ Ω min. @ +25°C @ rated WVDC
10⁹ Ω min. @ +85°C @ rated WVDC

Mechanical Dimensions



ATC PART NUMBER CODE



The above part number refers to a 550 Series (case size U) 100 nF capacitor, M tolerance (±20%), with T termination (Tin Plated over Nickel Barrier), tape and reel packaging.

ATC accepts orders for our parts using designations *with* or *without* the "ATC" prefix. Both methods of defining the part number are equivalent, i.e., part numbers referenced with the "ATC" prefix are interchangeable to parts referenced without the "ATC" prefix. Customers are free to use either in specifying or procuring parts from American Technical Ceramics.

For additional information and catalogs contact your ATC representative or call direct at (+1-631) 622-4700.

Consult factory for additional performance data.

Sales of ATC products are subject to the terms and conditions contained in American Technical Ceramics Corp. Terms and Conditions of Sale (ATC document #001-992 Rev. A 10/03). Copies of these terms and conditions will be provided upon request. They may also be viewed on ATC's website at www.atceramics.com/productfinder/default.asp. Click on the link for Terms and Conditions of Sale.

ATC has made every effort to have this information as accurate as possible. However, no responsibility is assumed by ATC for its use, nor for any infringements of rights of third parties which may result from its use. ATC reserves the right to revise the content or modify its product line without prior notice.

© 2009 American Technical Ceramics Corp. All Rights Reserved.

ATC # 001-1127 Rev. E; 5/14



AMERICAN
ATC North America
sales@atceramics.com

TECHNICAL
ATC Europe
saleseur@atceramics.com

CERAMICS
ATC Asia
sales@atceramics-asia.com



THE ENGINEERS' CHOICE™

www.atceramics.com