

# Ultra-Broadband Resistors



## UBR Series



AVX Passive Micro Component group is pleased to introduce the UBR Series of next generation of surface mount Ultra-Broadband Resistors. This product was designed utilizing our proprietary Glass Sandwich Flexitem<sup>®</sup> Technology, (GSFT). The Flexitem<sup>®</sup> is a surface mountable automotive qualified termination that adds an extra margin against damage due to flexure during installation.

The UBR Series has been designed with high quality selected materials that yield excellent performance. This product is ideal for use in Optical Transceiver Modules or any application requiring excellent ultra-broadband performance.

### FEATURES

- Frequency Range: DC to 20 GHz
- EIA 0402 Case Size
- Power Rating: 125 mW
- Operating Temperature: -40°C to +125°C
- 100% Laser Trimming for Tight Tolerances
- RoHS Compliant

### APPLICATIONS

- Optical Transceiver Modules
- Broadband Receiver
- TOSA / ROSA
- Wideband Test Equipment
- Low Noise Amplifier
- MMIC Amplifiers
- Mixers
- Directional Couplers
- Ultra-Broadband Splitters and Combiners

### MARKETS

- Opto-electronics
- Automotive
- Telecom
- Broadband Jamming for EW
- Satellite Communication

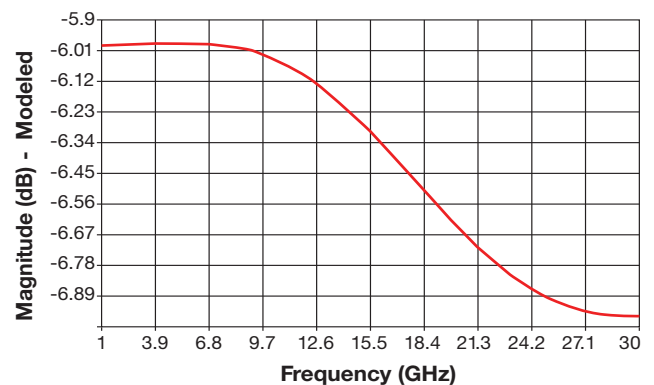
### HOW TO ORDER

UBR	0402	A	500	E	Z	TR
<b>Series Code</b> UBR = Ultra-Broadband Resistor	<b>Case Size</b> 0402 = 0402 BR0S = Special Request Please supply design or contact factory	<b>TCR (ppm/°C)</b> A = ±250 B = ±100 C = ±50* D = ±25* S = Special Request Please supply design or contact factory	<b>Resistance</b> First 2 Significant digits for Resistance R for decimal point	<b>Tolerance</b> E = ±0.5% F = ±1% G = ±2% S = Special Request Please supply design or contact factory	<b>Termination Type</b> Z = Flexitem <sup>®</sup> (Ag/Epoxy) NiSn plated 7 = Gold Termination	<b>Packaging</b> TR = 5000pcs, 7" reel

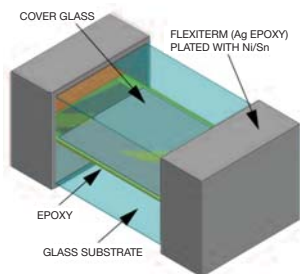
### Specifications

Resistor	Detail
Outline	EIA 0402
Package	Glass wafer sandwich
Standard Resistance Values (Ω)	25Ω, 50Ω, 100Ω, 200Ω
Resistance Value Range	From 25Ω to 400Ω
Termination	Flexitem <sup>®</sup> (Ag/Epoxy) NiSn plated Ni/Au - Gold termination
Power Rating	125 mW
Operating Temperature Range	-40°C to +125°C
Tolerance	0.5%, 1%, 2%
Cold Storage	-65°C

### Series Flatness vs. Frequency



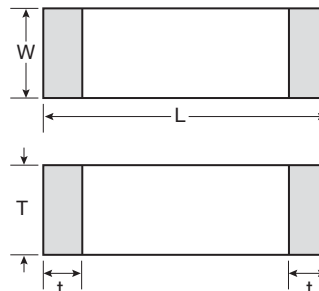
### RESISTOR MATERIAL PROPERTIES



Resistor Material (TaN): Properties	
Sheet Resistance (Ohms per Square)	TCR ppm/°C
30 to 100	50 to -150

### MECHANICAL DIMENSIONS

mm (inches)



Length (L)	1.00±0.10 (0.039±0.004)
Width (W)	0.50±0.10 (0.020±0.004)
Thickness (T)	0.50±0.10 (0.020±0.004)
Terminal (t)	0.25±0.15 (0.010±0.006)