UBR Series

Ultra-Broadband Resistors





GENERAL DESCRIPTION

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 Flexiterm® Technology, (GSFT). The Flexiterm® is a surface mountable automotive qualified termination that adds an extra margin against damage due to flexture 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. The use of glass sandwich technology and precision laser triming reduces parasitic noise up to 20 GHz.

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





Case Size 0402 = 04020201 = 0201



TCR (ppm/°C)

 $A = \pm 250$ $B = \pm 100$ $C = \pm 50*$

 $D = \pm 25*$ E = Special Request Please supply design or contact factory *Non-standard TCR values per

mm (inches)

mm (inches)

special request



Resistance

First 2 Significants for Resistance R for decimal point



Tolerance

E = +/-0.5%* $F = \pm 1\%$

 $G = \pm 2\%$

S = Special Request Please supply design or contact factory

*Non-standard tolerance values per special request



Termination Type

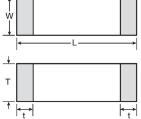
Z = Flexiterm® (Ag/Epoxy) NiSn plated

7 = Gold Termination* *Non-standard termination per special request



Packaging TR = 7" reel

MECHANICAL DIMENSIONS

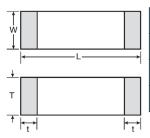


Length	1.00±0.10		
(L)	(0.039±0.004)		
Width	0.50±0.10		
(W)	(0.020±0.004)		
Thickness	0.50±0.10		
(T)	(0.020±0.004)		
Terminal	0.25±0.15		
(t)	(0.010±0.006)		

0402 SPECIFICATIONS

Resistor	Detail		
Outline	EIA 0402		
Package	Glass wafer sandwich		
Maximum Voltage	1 KV		
Resistance Value Range	From 16.6 Ohms to 200 Ohms		
Termination	FLEXITERM® (Ag/Epoxy), plated		
Power Rating	125 mW		
Operating Temperature Range	-40°C to +125°C		
Tolerances	0.5%, 1%, 2%, 5%		

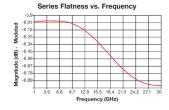
MECHANICAL DIMENSIONS



Length (L)	9			
Width	0.325±0.050			
(W)	(0.024±0.010)			
Thickness	0.325±0.050			
(T)	(0.020±0.004)			
Terminal	0.150±0.050			
(t)	(0.006±0.010)			

0201 SPECIFICATIONS

Resistor	Detail		
Outline	EIA 0201		
Package	Glass wafer sandwich		
Maximum Voltage	1 KV		
Resistance Value Range	From 16.6 Ohms to 200 Ohms		
Termination	FLEXITERM® (Ag/Epoxy), plated		
Power Rating	125 mW		
Operating Temperature Range	-40°C to +125°C		
Tolerances	0.5%, 1%, 2%, 5%		



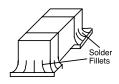


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SUGGESTED MOUNTING PAD DIMENSIONS



Normal Pads

W = Chip Width L = Chip Length T = Chip Thickness

Case Size	A Min.	B Min.	C Min.	D Min.
0201	0.0256	0.0075	0.0130	0.0268
0402	0.0213	0.0125	0.0206	0.0436

Dimensions are in inches.

NOTES:

Mounting will allow the solder fillet to travel up approximately 0.015" of the chip's end and side termination surface. Heavier fillets require a predeposition of solder paste and or an increase in pad dimensions. Typical solder paste application is a .008" to 0.01" thickness with >50% of volume in solder alloy.