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 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**

<table>
<thead>
<tr>
<th>Series Code</th>
<th>Case Size</th>
<th>TCR (ppm/°C)</th>
<th>Resistance</th>
<th>Tolerance</th>
<th>Termination Type</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBR</td>
<td>0402</td>
<td>A = ±250</td>
<td>E = ±0.5%</td>
<td>Z = Flexiterm® (Ag/Epoxy) NiSn plated</td>
<td>TR 5000pcs, 7” reel</td>
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<tr>
<td></td>
<td>BR0S</td>
<td>B = ±100</td>
<td>F = ±1%</td>
<td>7 = Gold Termination</td>
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<tr>
<td></td>
<td></td>
<td>C = ±50°</td>
<td>G = ±2%</td>
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<tr>
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<td>D = ±25°</td>
<td>S = Special Request</td>
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<td>S = Special Request</td>
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**Specifications**

- **Resistor Outline:** EIA 0402
- **Package:** Glass wafer sandwich
- **Standard Resistance Values (Ω):** 25Ω, 50Ω, 100Ω, 200Ω
- **Resistance Value Range:** From 250 to 400Ω
- **Termination Type:** Flexiterm® (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): 30 to 100
  - TCR ppm/°C: 50 to -150

**MECHANICAL DIMENSIONS**

- **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)