

0402BB (.040" x .020") 0402BB103KW500

0402 (.040" x .020")



◆ Product Features

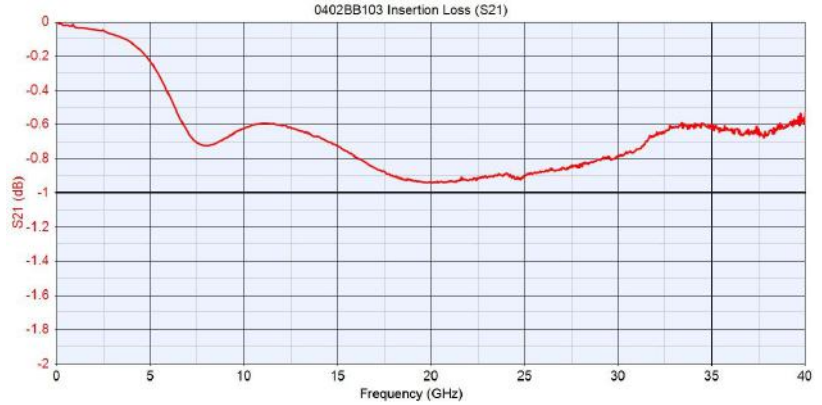
- Typical operating frequency range: 160 kHz (-3 dB point) to 40 GHz;
- Insertion Loss: < 1 dB, typical; 50 WVDC
- Available in Tin, and Tin/Lead (90%Sn/10%Pb) Terminations
- Available in 10K pcs/reel; Lower quantities available in cut-tape.

◆ Performance Curves – Insertion and Return Loss Charts

◆ Electrical Specifications

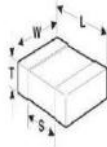
- Capacitance: 10 nF
- Operating Temperature Range: -55 °C to +125 °C
- Temperature Coefficient of Capacitance (TCC): ± 15% (-55 °C to +125 °C)
- Rated Voltage: 50 WVDC
- Dielectric Withstanding Voltage (DWV): 250% of rated WVDC for 5 secs.
- Insulation Resistance: 10¹¹Ω min. @ +25 °C @ rated WVDC

0402BB103 Insertion Loss (S21)



◆ Mechanical Dimensions

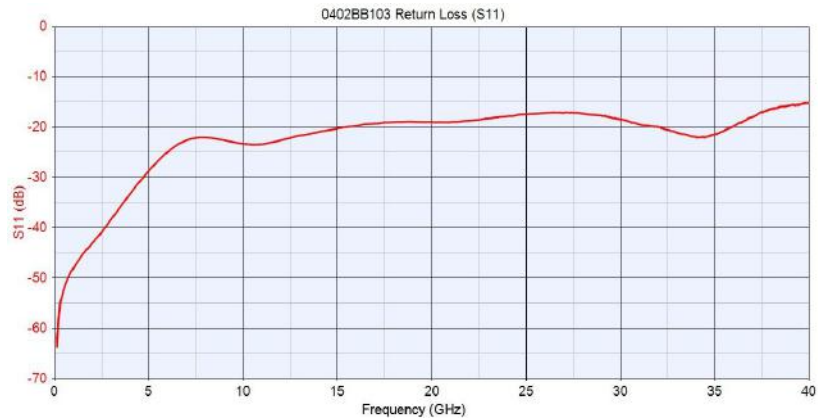
- L = 0.040 in. ±0.004 in. (1.016mm ±0.102mm)
- W = 0.020 in. ±0.004 in. (0.508 mm ±0.102 mm)
- T = 0.024 in. MAX. (0.610 mm MAX.)
- S = 0.016 in. MIN. (0.406 mm MIN.)



◆ Test Conditions

Typical responses for sample placed on a 10-mil-thick Rogers 4350B microstrip board, sample spanning a 15.5-mil gap in the 21-mil-wide center trace, pad length 12.3 mils. All measurements made using TRL de-embedding procedures.

0402BB103 Return Loss (S11)



◆ Part Numbering

0402 BB 10 3 K W 500

- WVDC
- W= Tin Plated over Nickel Barrier (RoHS) Compliant;
- L= Tin/Lead (90%Sn/10%Pb)
- Capacitance Tolerance (K tolerance = ±10%)
- Indicates number of zeros following digits of capacitance in pF
- Capacitance Code - First 2 significant digits for capacitance
- Passive Plus Series
- Case Size



PPI0402BB103Data110518RevA