

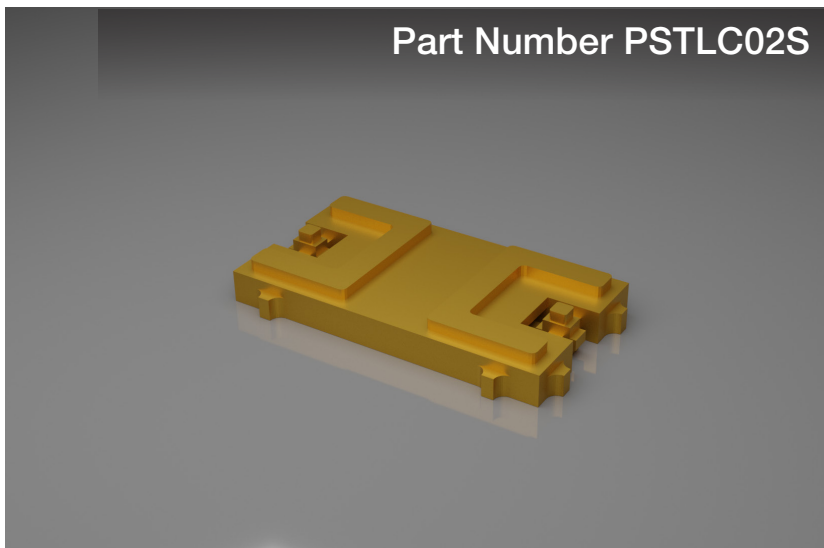
Features and Benefits

- **Small Size: 3.2 x 1.6mm**
- **Frequency Range: DC - 50 GHz**
- **Weight: 0.012g**
- **Low loss, high isolation**
- **Compatible with SMT assembly processes**

Applications

- **EW**
- **Test and Measurement**
- **Satellite Communications**
- **Telecommunications**
- **RADAR**

Part Number PSTLC02S



Ultra-Broadband, Cross-over Interconnect Bridge

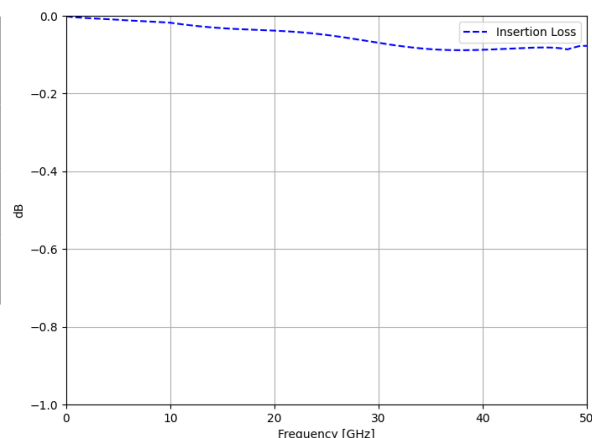
SMT launch configuration with a single-path connection.

Description

The PSTLC02S is a 3.2 x 1.6mm single-path cross-over, interconnect bridge. It has superior performance of typical 0.2dB IL and better than 20dB return loss over a frequency range of DC-50 GHz. The isolation is -40dB over the frequency range. These devices were designed for high-density, multi-channel receivers to manage line routing while helping to minimize the number of PCB layers.

Typical Electrical Performance

Parameter	Frequency Range (GHz)	Min	Typ	Max
Insertion Loss (dB)	DC - 50	-	$0.03 \cdot \sqrt{F(\text{GHz})}$	$0.1 + 0.04 \cdot \sqrt{F(\text{GHz})}$
Return Loss (dB)	DC - 50	-20	-25	-
Isolation (dB)*	DC - 50	-40	-45	-



*The isolation data simulated through HFSS. Requires channelization.

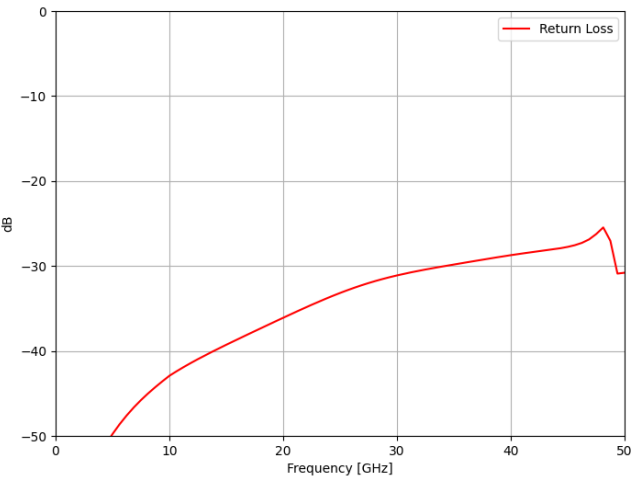
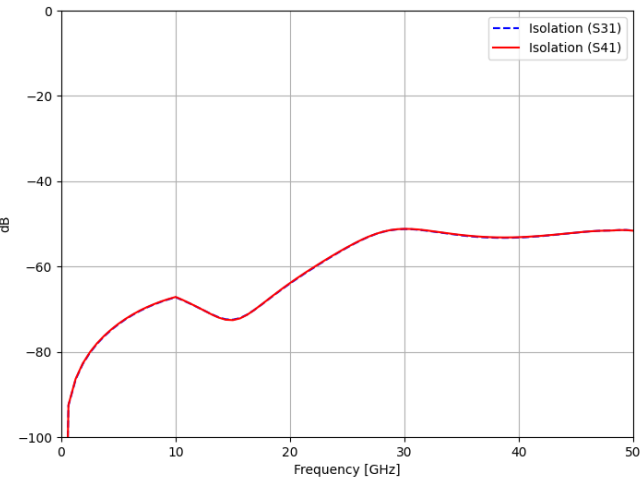
Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Ordering Information	PSTLC02S
Standard Packaging	Gel Pack
Alternative Packaging Available	PSTLC02STR tape and reel
Component Termination Finish	Immersion Gold
Export Certifications	TBA

Absolute Maximum Ratings

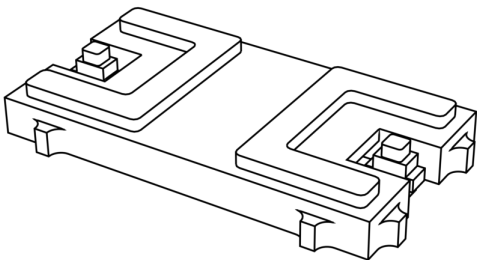
Power	TBD
Operating Temp	-55°C to 85°C
Solder Reflow	260°C max. for 10 seconds, 3 cycles
Epoxy Attach	150°C max. for 90 minutes

*Power handling will vary depending on balance between the amplifiers and supports one amplifier failing.



Simplified Block Diagram

Component View



Mechanical Drawing

