

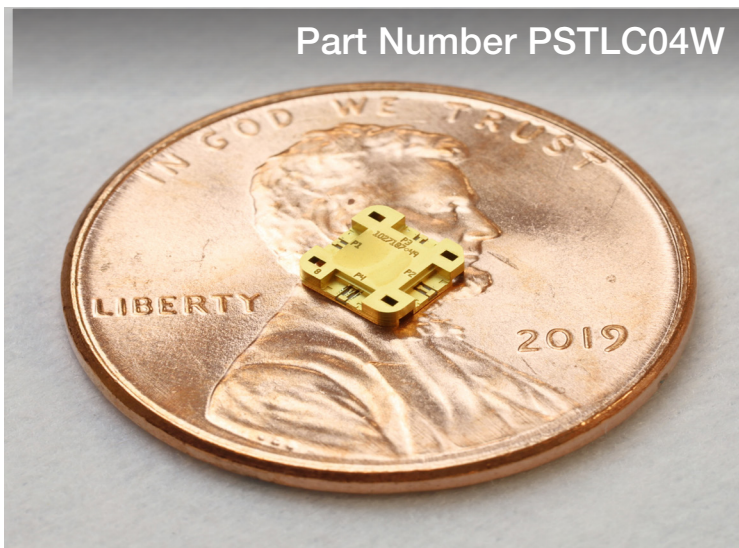
Features and Benefits

- **Small Size:** 4 x 4mm
- **Frequency Range:** DC - 72 GHz
- **Weight:** 0.1g
- **Low loss, high isolation**
- **Compatible with SMT assembly processes**

Applications

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

Part Number PSTLC04W



Ultra-Broadband, Cross-over Interconnect Bridge

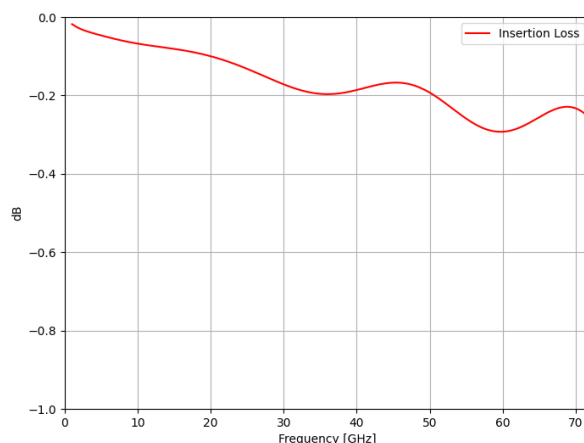
Wire-bondable for Chip and Wire Applications (Dual-Path connections)

Description

The PSTLC04W is a 4 x 4mm dual-path cross-over, interconnect bridge. It has superior performance of typical 0.34dB IL and better than 16dB return loss over a frequency range of DC-72 GHz. The isolation is -80dB over the frequency range if deployed in a cavity-based IMA. 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)	0.1 - 72	-	0.34	0.5
Return Loss (dB)	0.1 - 72	-16	-20	-
Isolation (dB)*	0.1 - 72	-80	-116	-



*The isolation data simulated through HFSS. Requires channelization.

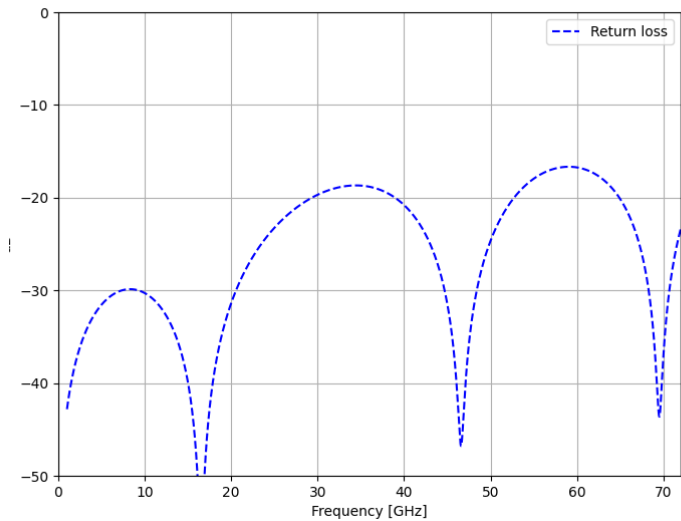
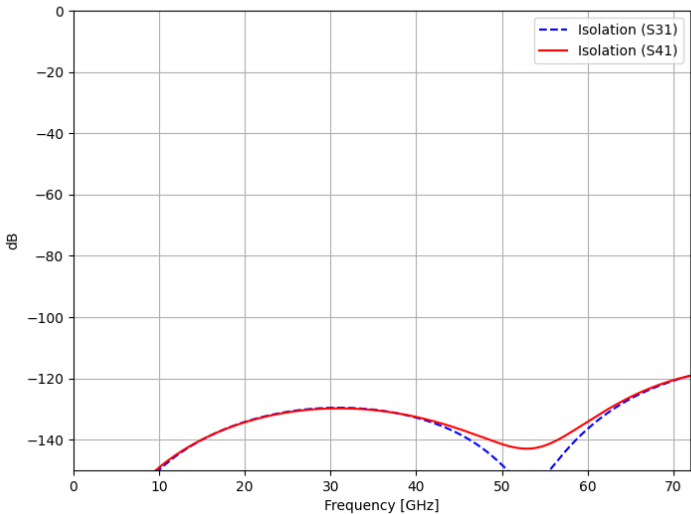
Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Ordering Information	PSTLC04W
Standard Packaging	Gel Pack
Alternative Packaging Available	PSTLC04WTR 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

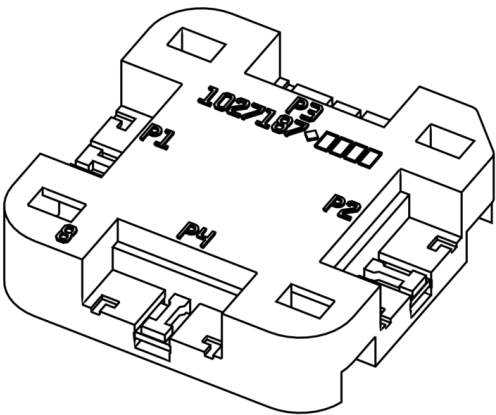
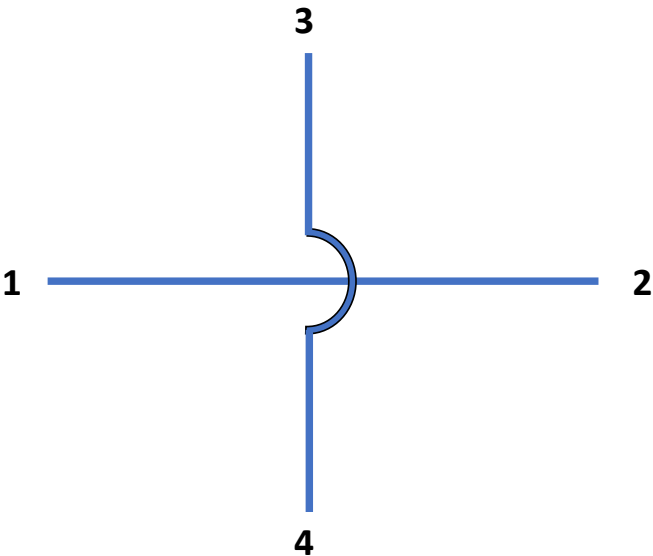
*Power handling will vary depending on balance between the amplifiers and supports one amplifier failing.



Note: Isolation as measured by probe testing at the part level. Higher isolation may be achieved by adding a lid externally.

Simplified Block Diagram

Component View



Mechanical Drawing

