

- True SMD device for reflow soldering to PCB
- Thin-film substrate-based microstrip circulator
- Small size, low profile & light weight
- Low insertion loss and high isolation
- Broadband design
- Designed for space communications
- RoHS compliant

Parameter	Value	Remark
Product Type	Isolator	
Configuration	3-Port T-Junction	
Orientation of Rotation	clockwise	
Frequency Range	5.2 to 6 GHz	
Forward Peak Power	20 W	max.
Forward Average Power	2 W	max.
Reverse Power	10%	permanently
	100%	short-term without damage
Insertion Loss	≤ 0.5 dB	
Return Loss	≥ 18 dB	
Isolation	≥ 18 dB	
RF Waveguide	Microstrip line, 50 Ω	
RF Flanges / Connectors	SMD solder pads	
Metallization	Au / Ni / Au (ENIG)	reflow solderable ¹⁾
Temperature Range	-40°C to +85°C	operational
	-40°C to +120°C	storage
	260°C max. for 10s	reflow soldering
Dimensions	13 x 13 x 2.5 mm ³	
Footprint Drawing	see Fig. 1	
PCB Layout Drawing	see Fig. 2	
PCB Material (recommended)	Rogers RO4003 [®] , 20 mil	Cu (50µm) / Ni (4µm) / Au (<1µm)
Packaging	Tape and reel, RC1527	

Notes:

¹⁾ Solderability and coating durability limited to 6 month after shipment.

²⁾ Quality Control: 100% visual inspection. Electrical testing: 1 sample per production batch.

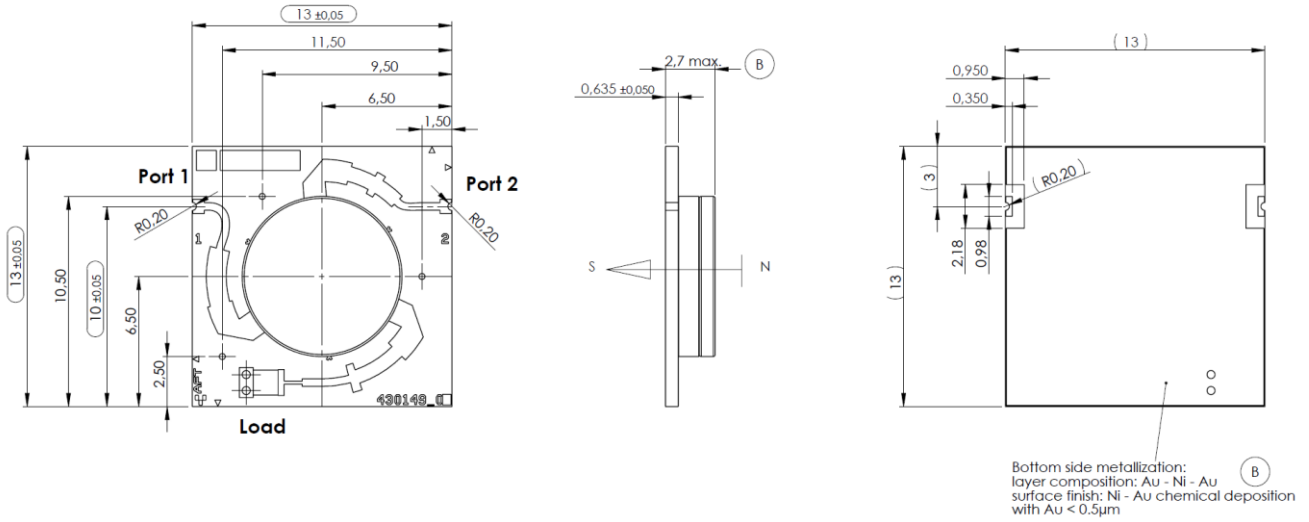


Fig. 1: Interface drawing SMD circulator C-band

PCB-Landing Pads

Substrate material

RO4003 20mil
Cu 50μm, Ni 4μm Au < 1μm

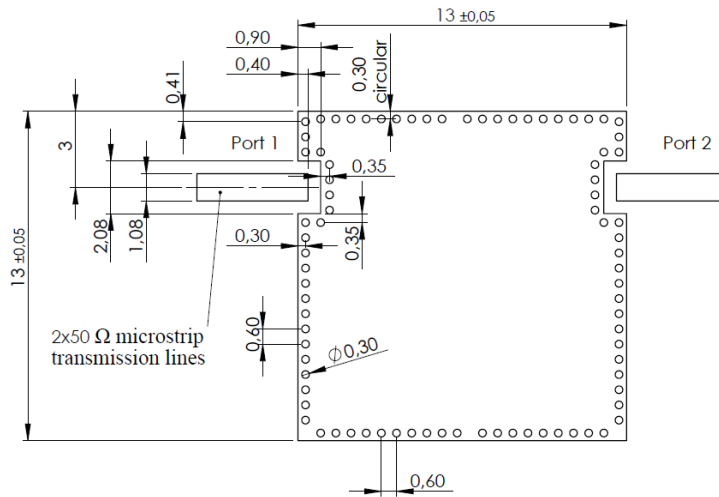


Fig. 2: PCB conductor pattern SMD circulator C band

Rev.	Remark	Date	Name
00	initial	25.03.2022	C. Weil