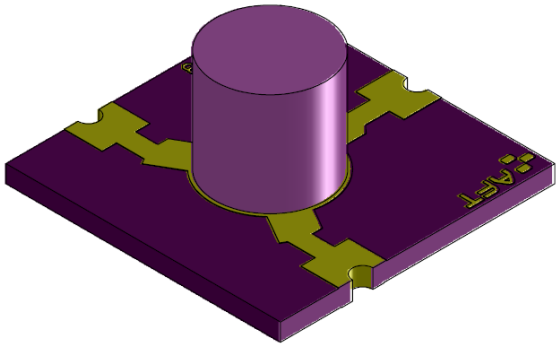

- True SMD device for reflow soldering to PCB
- Thin-film substrate-based microstrip circulator
- Small size, low profile & light weight
- Low insertion loss and high isolation
- Broadband design
- RoHS compliant

Parameter	Value	Remark
Product Type	Circulator	
Configuration	3-Port T-Junction	
Orientation of Rotation	clockwise	
Frequency Range	23 to 27 GHz	
Forward Peak Power	1 W	max.
Forward Average Power	1 W	max.
Reverse Power	10% 100%	permanently short-term without damage
Insertion Loss	≤ 1 dB	
Return Loss	≥ 18 dB	
Isolation	≥ 18 dB	
RF Waveguide	Microstrip line, 50 Ω	
RF Flanges / Connectors	SMD solder pads	
Metallization	Cu / Ni / Au (chem.)	solderable and bondable
Temperature Range	-40°C to +85°C	operational
	-40°C to +120°C	storage
	260°C max. for 10s	reflow soldering
Dimensions	4 x 4 x 2 mm^3	
Footprint Drawing	see Fig. 1	
PCB Layout Drawing	see Fig. 2	
PCB Material (recommended)	Rogers RO3003®, 10 mil	Cu (35µm) / Ni (4µm) / Au (<1µm)
Packaging	Tape and reel, RC1527	

Notes:

[1)] Solderability and coating durability guaranteed for 6 month after shipment.

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

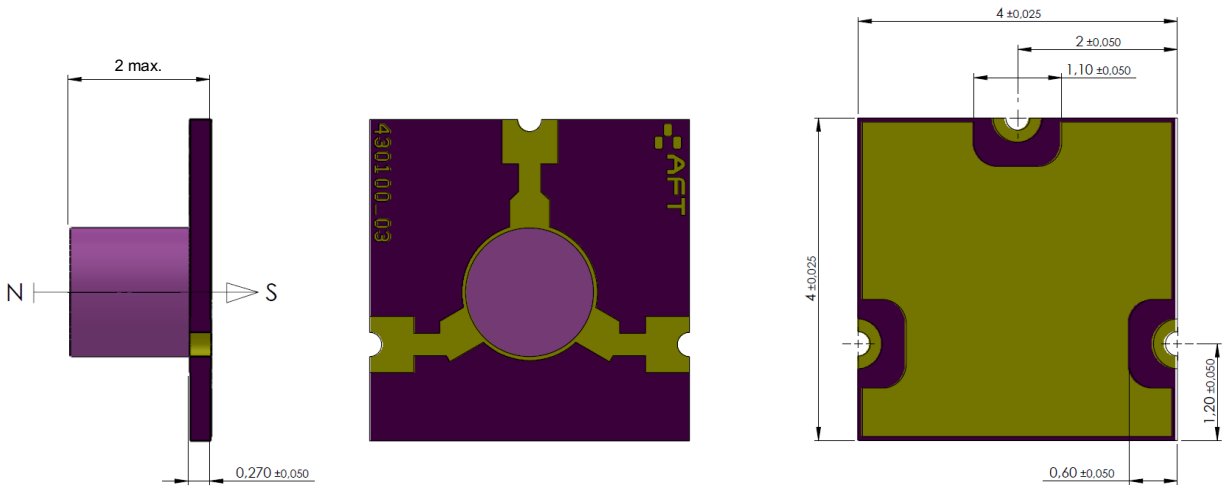

Fig. 1: Interface drawing SMD circulator Ka-Band

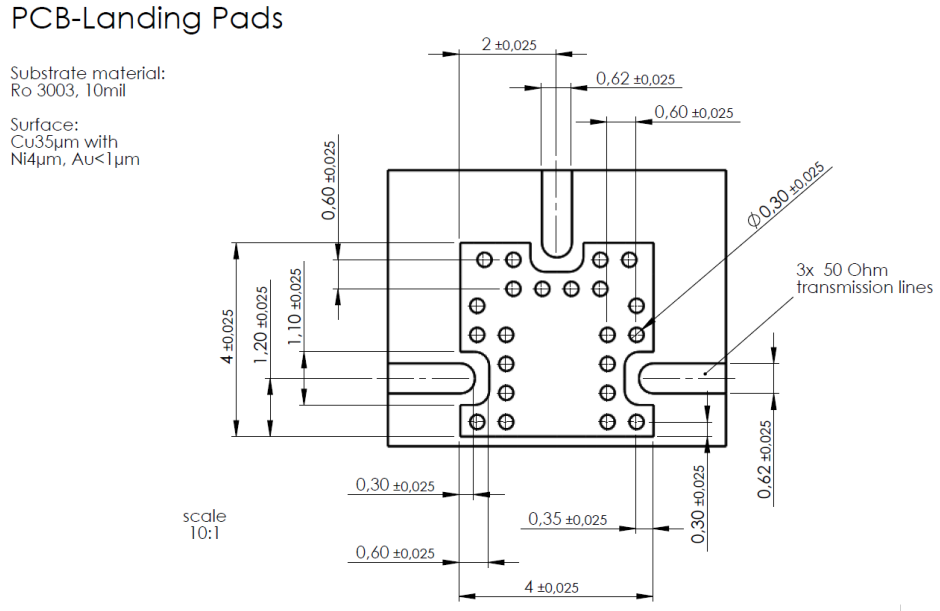

Fig. 2: PCB conductor pattern SMD circulator Ka-Band

Rev.	Remark	Date	Name
00	initial	12.02.2018	C. Weil
01	Figures	19.12.2019	C. Weil
	Formal update	25.03.2022	C. Weil