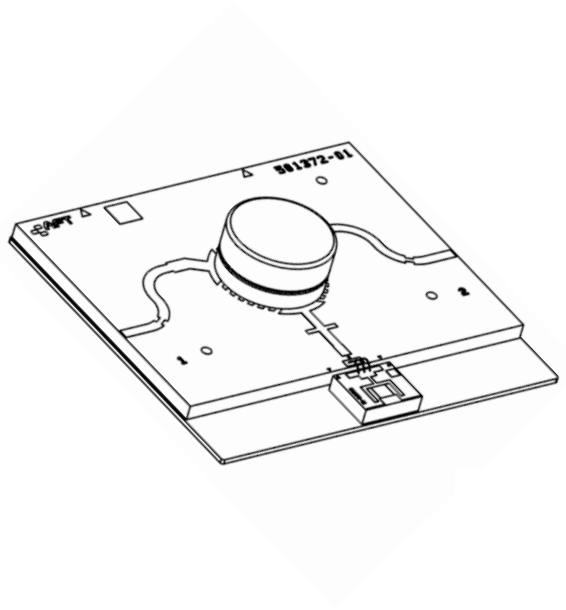

- Drop-in device for adhesive bonding of backplane and wire- or ribbon bonding
- Thin-film substrate-based microstrip circulator
- Discrete on chip load termination integrated on common backplane
- Small size, low profile & light weight
- Low insertion loss and high isolation
- No tuning required
- Designed for space applications
- RoHS compliant

Parameter	Standard Value	Remark
Product Type	Isolator	
Configuration	Drop in circulator with discrete load termination	
Frequency Range	11.3 to 13.5 GHz	
Forward Power	3 W	
Reverse Power	50%	
Insertion Loss	≤ 0.5 dB	at room temperature
	≤ 0.7 dB	for ≤ 75°C
	≤ 1 dB	for ≤ 110°C
VSWR	≤ 1.33 (≥ 17 dB)	at room temperature
	≤ 1.50 (≥ 14 dB)	for ≤ 75°C
	≤ 1.67 (≥ 12 dB)	for ≤ 110°C
Isolation	≥ 16 dB	at room temperature
	≥ 15 dB	for ≤ 110°C
RF Waveguide	Microstrip line, 50 Ω	
RF Flanges / Connectors	Bond pads for Au-wire or ribbon bonding	bonding areas free of scratches
	Backplane for adhesive Ag-epoxy bonding	
Metallization	Au (5µm)	on top and bottom of ferrite substrate
	Au (1µm)	on backplane
Temperature Range	-30°C to +110°C	operating
	-55°C to +125°C	storage
	+150°C for 2h	assembly

Dimensions	11.94 x 10.67 mm^2	
Height	2.54 mm max.	
Substrate thickness	0.65 mm ± 0.05mm	including backplane
Footprint Drawing	FP-10075669	
Comment	no tuning or ferrite surface scratching allowed	

Rev.	Remark	Date	Name
00	Initial	12.05.2017	C. Weil
01		20.02.2018	C. Weil
02		24.04.2018	C. Weil
	Formal update	25.03.2022	C. Weil