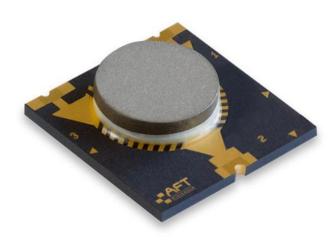


## Data Sheet C3-MS-X-01-Au SMD Circulator 8-12GHz Au

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- 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
- Fullband design
- Designed for military, space and commercial applications
- RoHS compliant

Parameter	Standard Value	Remark
Product Type	Circulator	
Configuration	3-Port Y-Junction	
Frequency Range	8.0 – 12.0 GHz	
Forward Peak Power	2 W	nominal
<b>Duty Cycle</b>	30%	nominal
Reverse Power	10% 100%	permanently short-term without damage
Insertion Loss	$\leq 0.45 \text{ dB}^{-1}$ $\leq 0.70 \text{ dB}^{-1}$	< 0.5 W, at room temperature (RT) at 2 W, at RT
Return Loss	≥ 16 dB	at RT
Isolation	≥ 16 dB	at RT
RF Waveguide	Microstrip line, 50 $\Omega$	
RF Flanges / Connectors	SMD solder pads	
Metallization	Au / Ni / Au	chem. Ni / Au, reflow solderable <sup>2)</sup>
Temperature Range	-40°C to +85°C	operational
	-40°C to 120°C	storage
	260°C max. for 10s	reflow soldering
Dimensions	7 x 7 x 2.5 mm <sup>3</sup>	
<b>Footprint Drawing</b>	FP-10073976	
PCB Layout Drawing	FP-10073974	
PCB Material (recommended)	Rogers RO4003 <sup>®</sup> , 300µm	Cu (50µm) / Ni (4µm) / Au (<1µm)

<sup>&</sup>lt;sup>1)</sup> Not applicable for the path 3 to 1

<sup>&</sup>lt;sup>2)</sup> Solderability and coating durability limited to 6 month after shipment