

### General Description:

MM-CICI-040120-Cryo are ultra-low insertion loss cryogenic isolators and circulators operating in the 4-12 GHz frequency range. They have been designed from ground up to meet the strict requirements of ultra-low temperature physics research. The OFHC copper body ensures minimum loss and that this loss reaches the lowest possible temperature to minimize thermal noise.

### Features:

- Broad Bandwidth
- High Isolation
- Low Insertion Loss; Low VSWR

### Applications:

- quantum computing

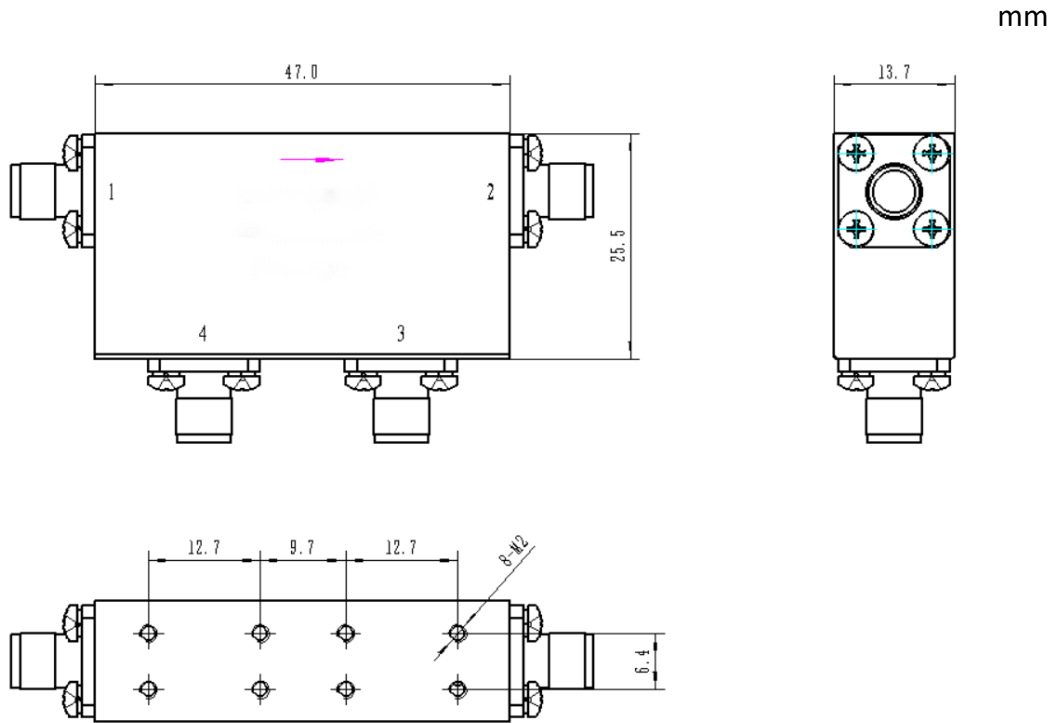
### Electrical Specifications :

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	4		12	GHz
Insertion Loss		0.4		dB
Return loss		-16		:1
Isolation		30		dB
Impedance		50		$\Omega$

### Mechanical Specifications:

Parameter	Value
Size	47×25.5×13.7 mm
Weight	150g
Material / Finishing	Nickel plated
RF Connector	SMA-K

### Outline Drawing:



### Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		10mK-100K
Storage Temperature		-55°C~+85°C
Random Vibration	MIL-STD-883K, Method 2026, Cond. IB	50 - 2000 Hz, 7.3 Grms
Humidity	MIL-STD-202, Method 103B, Cond. B	100% RH at 35c, 95%RH at 40°C
Altitude	MIL-STD-883K, Method 1001, Cond. C	50,000 feet