

DC-90-140GHz Continuous Diplexer

DC-90-140GHz/0.8mm Female/WR-08

Model: TMDX-90G140G-08-0.8

TMDX- 90G140G- 08-0.8 is a continuous Diplexer that operates from DC to 140 GHz. The diplexer offers a typical insertion loss of 3.5 dB. All ports exhibit good impedance matching for transmit- receive duplexing applications across the operating band. The diplexer is configured as an inline package with 0.8mm coaxial connectors and WR-08 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range: DC-140GHz
- Low Insertion Loss
- High Isolation
- Compact Package

Applications:

- Test Lab
- Sub-assemblies
- Test Instrumentations

Electrical Characteristics:

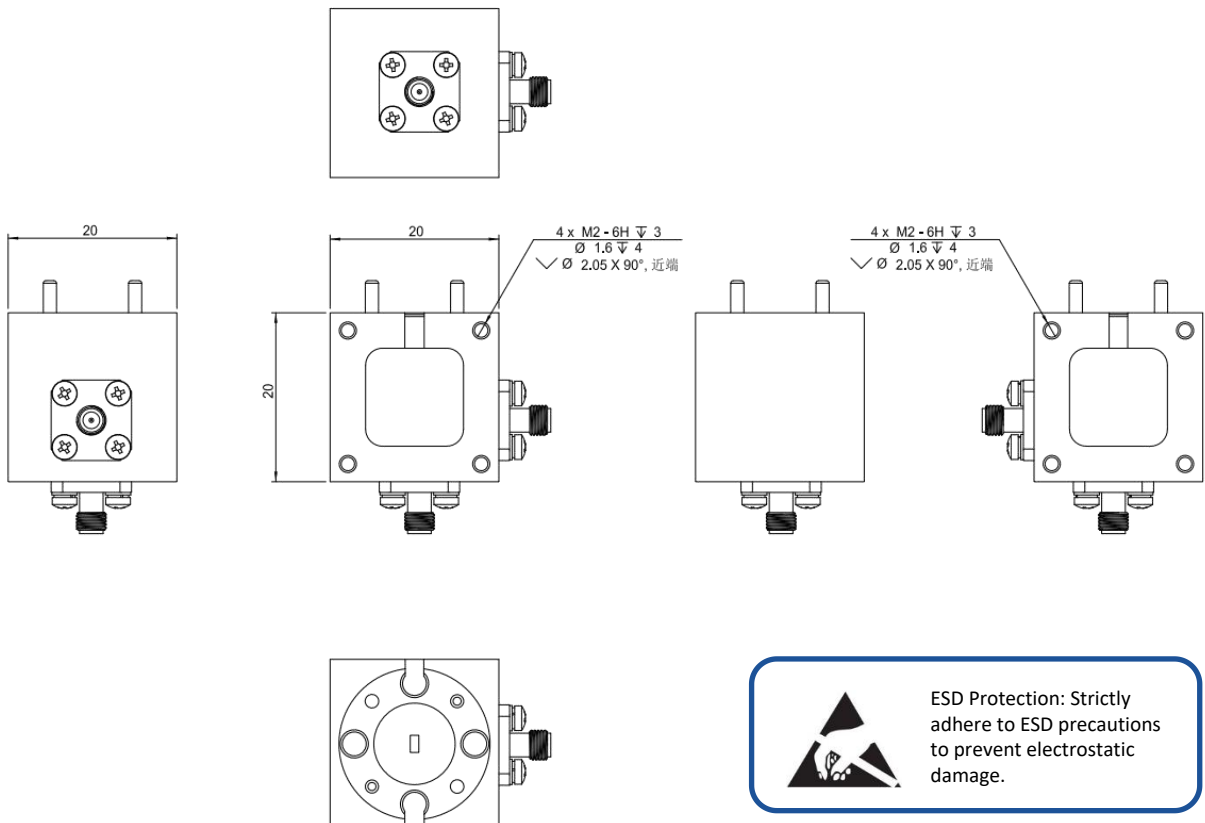
Parameter	Min	Typ	Max	Min	Typ	Max	Units
	RF_DLP			RF_DHP			
Frequency range	DC		90	90		140	GHz
Insertion Loss		3.5			2.5		dB
Port Isolation		30dB @98GHz			30dB @72GHz		dB
Input Rreturn Loss		-10			-10		dB
Coaxial port Impedance		50			50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Common connector	0.8mm Female	
Low Band connector	0.8mm Female	
High Band connector	WR-08/UG-387/U	
Material	Brass	mm
Finish	Gold plated	
Size	20*20*20	mm

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMDX-90G140G-08-0.8	3-port continuous diplexer , DC-90-140GHz, Insertion loss: 3.5dB(type), Return loss: 10dB(type)	Rev.1.0