

200-216&222-243GHz Diplexer

200-216&222-243GHz/WR-4.3

Model: TMDX-210228-16-04

TMDX-210228-16-04 is a broadband low pass/high pass diplexer capable of multiplexing low frequency (200-216GHz) and high frequency (222-243GHz) signals.. The diplexer offers a typical insertion loss of 2 dB. All ports exhibit good impedance matching for transmit- receive duplexing applications across the operating band. The input and output ports configuration offers an inline structure with WR-4.3 waveguides and UG-387/U-M anti-cocking flanges. .

Features:

- Frequency range: 200-216&222-243GHz
- Low Insertion Loss
- High Isolation
- Compact Package

Applications:

- Test Lab
- Sub-assemblies
- Test Instrumentations

Electrical Characteristics:

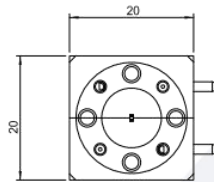
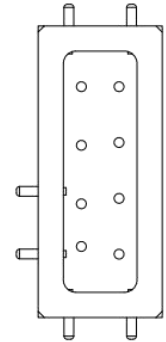
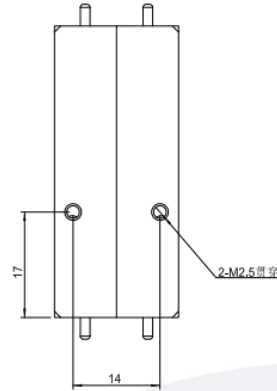
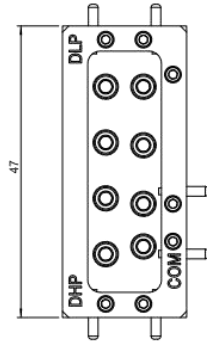
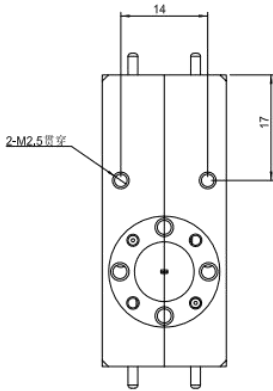
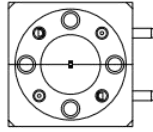
Parameter	Min	Typ	Max	Min	Typ	Max	Units
	RF_DLP			RF_DHP			
Frequency range	200		216	222		243	GHz
Insertion Loss	1.7	2	2.5	1.8	2	2.5	dB
Rejection	50dB @222GHz			50dB @216GHz			dB
Input Rreturn Loss		-15			-15		dB

Mechanical Specifications:

Parameter	Value	Units
Common connector	WR-4.3/UG-387/U	
Low Band connector	WR-4.3/UG-387/U	
High Band connector	WR-4.3/UG-387/U	
Size	47*20*20	mm
Material	Aluminum	
Finish	Conductive Coating, Natural Finish	

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

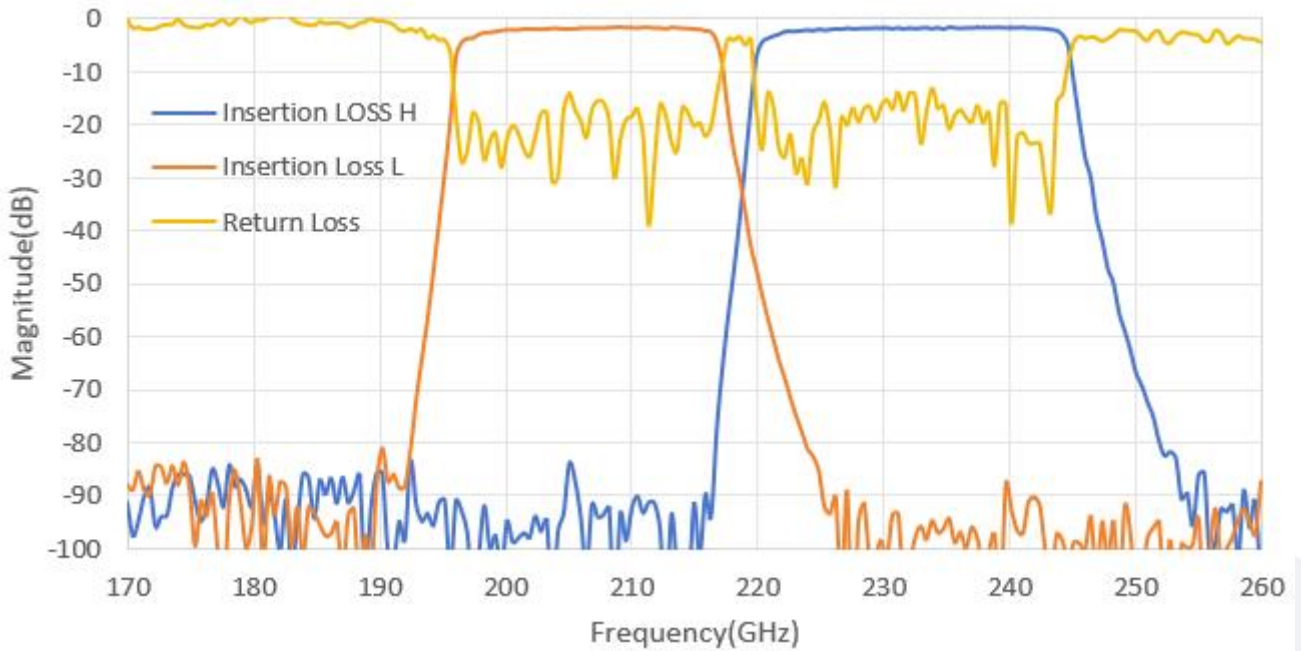
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMDX-210228-16-04	3-port continuous diplexer , 200-216&222-243GHz, Insertion loss: 2dB Typ, Return loss: -15dB Typ	Rev.1.0

Typical Performance Data:

Magnitude vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.