

Features

- Low Insertion Loss
- Ultra-Low PIM
- High Power
- Connectorized

Descriptions

700/800/900 MHz band cavity low PIM triplexer for 5G PIM test bench applications.

Electrical Specifications

Parameter	Unit	Specification		
		700 / 800 / 900 Tx1 Channel		
Center Frequency (Fc)	MHz	729.75	793	930
Passband Frequency Range	MHz	728 – 731,5	790 - 796	925 - 935
Insertion Loss in Passband	dB	1.3 max		
Ripple in Passband	dB	0.8 max		
Return Loss in Passband	dB	18.0 min		
Rejection at any other Tx1 and Tx2 Band	dB	35 min		
Rejection at any Rx Band	dB	82 min		
Rejection at 2 nd and 3 rd Harmonic of Tx1 band	dB	100 min		
Operating Input Power	Watt	200 CW max		
		700 / 800 / 900 Tx2 Channel		
Center Frequency (Fc)	MHz	752.5	815.5	952.5
Passband Frequency Range	MHz	741 – 764	808 - 823	945 - 960
Insertion Loss in Passband	dB	1.3 max		
Ripple in Passband	dB	0.8 max		
Return Loss in Passband	dB	18.0 min		
Rejection at any other Tx1 and Tx2 Band	dB	35 min		
Rejection at any Rx Band	dB	82 min		
Rejection at 2 nd and 3 rd Harmonic of Tx2 band	dB	100 min		
Operating Input Power	Watt	200 CW max		
		700 / 800 / 900 Rx Channel		
Center Frequency (Fc)	MHz	707	847	897.5
Passband Frequency Range	MHz	698 - 716	832 - 862	880 - 915
Insertion Loss in Passband	dB	1.5 max		
Ripple in Passband	dB	1.0 max		
Return Loss in Passband	dB	18.0 min		
Rejection at any Tx1 and Tx2 band	dB	95 min		
Rejection at any other Rx band	dB	50 min		
VSWR withstanding capability				

VSWR withstanding capability at 2 x 45 W power output at ANT port at all phase angles from 0 to 360°, with an open circuit at 2000m altitude and +70°C		IM3 tests to be repeated and should pass after this test
PIM requirements		
IMD in Rx band, Ant port (2 tones +43 dBm each)	dBc	175 typ., 173 min
IMD in RX band, Ant port (2 tones +46 dBm each)	dBc	174 typ., 171 min
DC/AISG Transparency		
All Port DC impedance	-	Grounded
Connectors	-	7/16 Din female Ant ports, N females Tx ports, SMA female Rx port
RF Connector Configuration	-	In Line
Weight	kg	12 max
Dimensions	mm	435 x 425 x 65 max
Finish	-	Aluminum natural color
Product Configuration	-	Single unit
Mounting	-	Screw mount
Mounting Orientation	-	Any Dierction
Operating Temperature Range	°C	+10 ~ +70
IP Class	-	IP63 for indoor
Lightning protection all ports	-	5 kA, 8/20 us pulse
EMC / EMI	-	NEBS GR-1089-CORE and EN 55022

Mechanical Drawing



