

### Features

- Low Insertion Loss
- High Attenuation/Isolation
- Ultra Low PIM
- High Power Handling
- Compact Size

### Descriptions

DIN and SMA connector mount cavity quadruplexer developed for 3700MHz ultra low PIM test bench applications.

### Electrical Specifications

Parameter	Unit	Specification			
		3500-3700 MHz Duplexer		3730-3980 MHz Duplexer	
		RX L to ANT	TX 1 to ANT	RX H to ANT	TX 2 to ANT
Center Frequency	MHz	3550	3680	3915	3765
Passband Frequency Range	MHz	3500 ~ 3600	3660 ~ 3700	3850~3980	3730~3800
Insertion Loss in Passband	dB	1.5 max	1.0 max	1.5 max	1.0 max
Ripple in Passband	dB	1.0 max	0.5 max	1.0 max	0.5 max
Return Loss (VSWR) in Passband	dB	20 min RT; 18 min full-temp.		20 min RT; 18 min full-temp.	
Attenuation	dB	95 min @TX 1 & TX 2	82 min @RX L & RX H	95 min @TX 1 & TX 2	82 min @RX L & RX H
		50 min @ RX H	35 min @TX 2	50 min @ RX L	35 min @TX 1
Power Handling	Watt	-	120 CW max	-	120 CW max
VSWR at 2x45W output at ANT all phase angle from 0 to 360 degrees with an open circuit at 2000m altitude and 70 °C	-	IM3 tests to be repeated and should pass after the test			
IMD in RX L and RX H band, ANT port, 2 tone +43dBm each	dBc	178 typ.; 175 min			
IMD in RX L and RX H band, ANT port, 2 tone +46dBm each	dBc	175 typ.; 172 min			
In/Out Impedance	Ohm	50			
Operating Temperature	°C	-10 ~ +70			
Connectors	-	7/16 DIN Female ANT; N Female TX 1&2; SMA Female RX L&H Ports			
DC/AISG Transparency	-	All Ports DC Impedance Grounded			
Dimensions (max)	mm	230 x 295 x 40 (L x W x H) without connectors			
Finish	-	Aluminum Natural Color			
Weight	Kg	5 max			
IP Class	-	IP63			
Climate Class	-	NEBS GR-63-CORE			
Lightning Protection	-	5 kA, 8/20 US Pulse All Ports			
EMC / EMI	-	NEBS GR-1089-CORE and EN55022			
MTBF (Telcordia SR-332 @ 25 °C)	-	1,000,000 hours min			
Lifetime	-	10 years min			
RoHS Compliance	-	2.0			

## Mechanical Drawing

