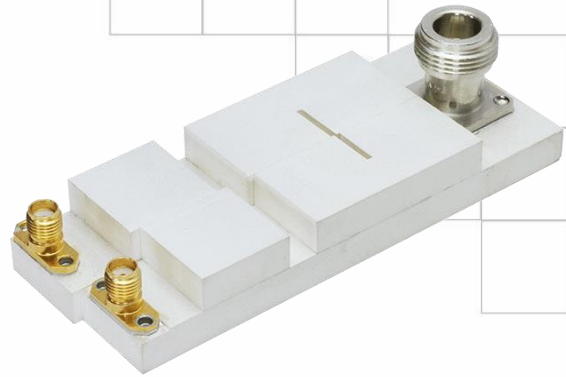


CMD003B - PRELIMINARY

Band 3 CMD Series Duplexer

Features

- Low Loss with High Rejection
- Superior power handling and reliability
- Part of the CMD family of Metro-cell duplexers
- Available for either PCB mounting or with various connectors including SMA, SMP-Max, and other options.



Part Dimensions: ESTIMATE <177 x <53 x <16.5 mm • <399 g
Materials: Ag plated ceramic block

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade active antennas and outdoor Metro-cells for 4-10W at the antenna port.
- Wide-band DAS, Repeaters, or small-cells requiring multi-channel or carrier aggregation

Description

Ceramic waveguide duplexer based on ClearPlex technology supports FDD frequency bands. Provides superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other duplexer technologies. Performance is comparable to compact Air Cavity in dramatically smaller size.

Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	32.0 Watt max
Peak Input Power	-	-	-	320 Watt max
Passive Intermodulation (2x 10W)	-	-	-	-110 dBm TBC
Lightning Surge Handling at Ant port	-	-	-	> 10 kA TBC

Antenna to UL Response

Passband Insertion Loss (5 MHz avg)	1710 - 1785	1.9 dB max
Passband Return Loss	1710 - 1785	16 dB min
Attenuation:	1805 - 1880	100 dB min est TBC

DL to Antenna Response

Passband Insertion Loss (5 MHz avg)	1805 - 1880	1.9 dB max
Passband Return Loss	1805 - 1880	16 dB min
Attenuation:	1710 - 1785	100 dB min est TBC

DL to UL Response

Attenuation for UL band	1710 - 1785	100 dB min est TBC
Attenuation for Transition band	1785 - 1805	55 dB min
Attenuation for DL band	1805 - 1880	100 dB min est TBC

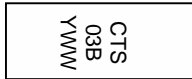
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

PCB Layout (Top-Down View)

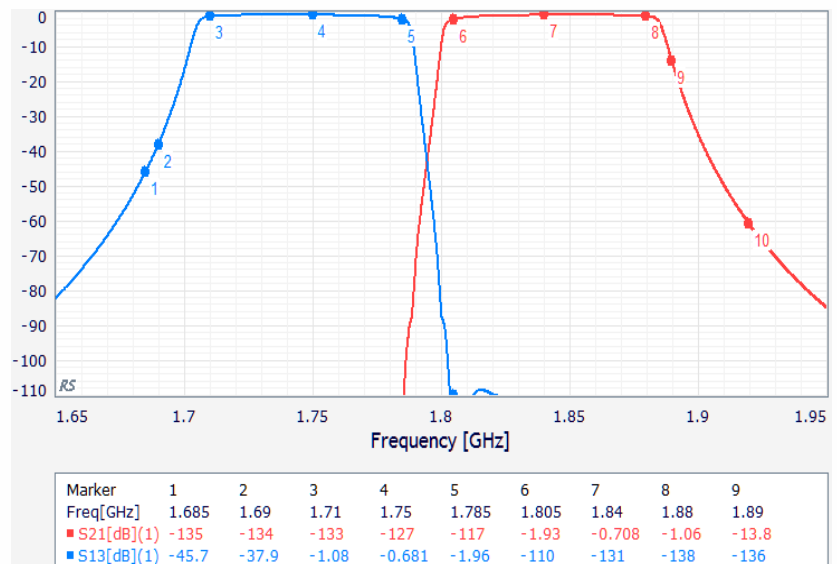
Packaging and Marking



Product is shipped in Pre-formed foam trays

The trays have xx slots each with one filter per slot. Boxes are packed with 12 Trays per box for a total of xx filters per box.

Electrical Response





Electrical Specifications – Supplemental Spectrum Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Antenna to UL Response				
Attenuation:	1 - 1560	80 dB		70 dB min
	1560 - 1685	45 dB		40 dB min
	1685 - 1690	35 dB		20 dB min
	2110 - 2483?	80 dB		70 dB min
DL to Antenna Response				
Attenuation:	1 - 1710	80 dB		70 dB min
	1785-1795	30 dB		15 dB min
	1890 - 1920	13 dB		10-12 dB min?
	1920 - 2483?	60 dB		50 dB min