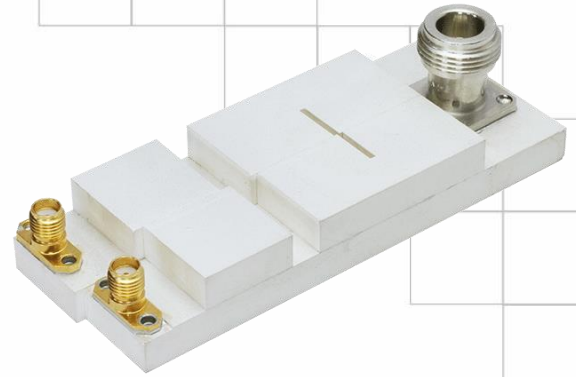


CMD002A - PRELIMINARY

Band 2 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: 94 × 35 × 14.5 mm • <195 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	-	-	-	20.0 Watt max
Peak Input Power	-	-	-	200 Watt max
Passive Intermodulation (2x 5W)	-	-	-	-110 dBm
Lightning Surge Handling at Ant port	-	-	-	> 10 kA (TBC)

Antenna to UL Response

Passband Insertion Loss (5 MHz avg)	1850 - 1910	1.5 dB	1.7 dB max	1.9 dB max
Passband Return Loss	1850 - 1910			16 dB min
Attenuation:	1930 - 2000			76 dB min

DL to Antenna Response

Passband Insertion Loss (5 MHz avg)	1930 - 1990	1.6 dB	1.8 dB max	1.9 dB max
Passband Return Loss	1930 - 1990			16 dB min
Attenuation:	1850 - 1910			81 dB min

DL to UL Response

Attenuation for UL band	1850 - 1910			82 dB min
Attenuation for Transition band	1910 - 1930			>55 dB min
Attenuation for DL band	1930 - 2000			77 dB min

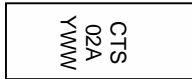
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

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

Mechanical Drawing

PCB Layout (Top-Down View)

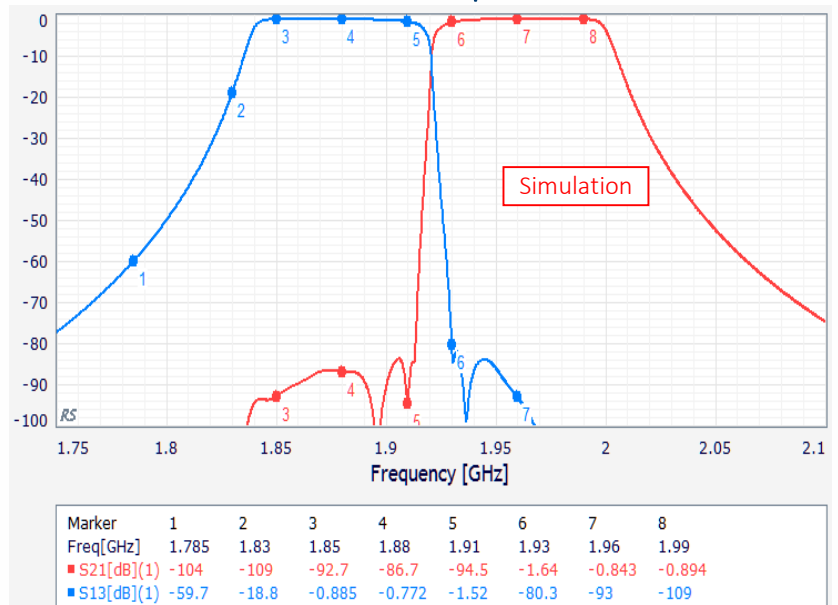
Packaging and Marking



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 - 1685			>70 dB min
	1685 - 1710			>60 dB min
	1710 - 1785			>50 dB min
	1830			15 dB min
	2000 - 2483			>50 dB min
DL to Antenna Response				
Attenuation:	1 - 1850			>70 dB min
	2110 - 2200			>35 dB min
	2200 - 2483			>50 dB min