

Product Brief

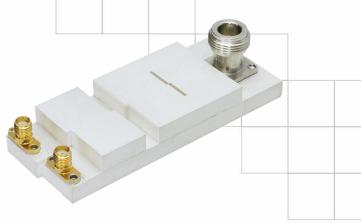




CMD030B - PRELIMINARY Band 30 CMD Series Duplexer

Features

- Close-in rejection for FCC WCS band compliance
- 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 136 × 51.5 × 14.5 mm • <270 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 (10 MHz avg)	2305 - 2315			1.6 dB max
Passband Return Loss	2305 - 2315			16 dB min
Attenuation:	2350 - 2360			>77 dB min
DL to Antenna Response				
Passband Insertion Loss (10 MHz avg)	2350 - 2360			3.2 dB max
Passband Return Loss	2350 - 2360			16 dB min
Attenuation:	2305 - 2315			>80 dB min
DL to UL Response				
Attenuation for UL band	2305 - 2315			>80 dB min
Attenuation for Transition band	2315 - 2350			>55 dB min
Attenuation for DL band	2350 - 2360			>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

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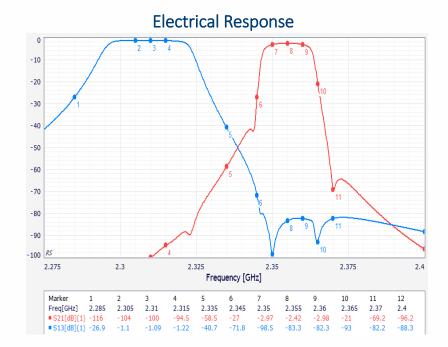
PCB Layout (Top-Down View)

Packaging and Marking

CTS 30B YWW

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.





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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 - 2110			70 dB min
	2110 - 2200			60 dB min
	2200-2285			20 dB min
	2335 - 2350			30 dB min
	2360 - 2690			60 dB min
DL to Antenna Response				
Attenuation:	1 - 2305			70 dB min
	2320-2344			22 dB min
	2344-2345			30 dB min
	2365 - 2370			17 dB min
	2370 - 2400			30 dB min
	2400 - 2690			70 dB min