

CDX1025A - PRELIMINARY

Band 4/10+ and 2/25 ClearPlex Diplexer

Features

- Narrowband diplexing combines neighboring frequency bands
- Exceptional power handling, PIM, Return Loss, and reliability
- Part of the CDX family of high performance diplexers
- Available for either direct PCB mounting or with various connectors including SMA, SMP-Max, and other options.



Part Dimensions: **ESTIMATE** <95 x <55 x <14.5 mm • 180 g
Materials: Ag plated ceramic block

Applications

- Wireless Infrastructure applications
- High-performance Macro-basestation multi-band antennas.

Description

Ceramic waveguide diplexer based on ClearPlex technology supports neighboring frequency bands. Provides exceptional rejection, insertion loss, reliability, as well as both peak and average power handling. Performance is comparable to 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 (per side)	-	-	-	50.0 Watt max
Peak Input Power (per side)	-	-	-	500 Watt max
Average Output Power (combined port)	-	-	-	80.0 Watt max
Peak Output Power (combined port)	-	-	-	800 Watt max
Passive Intermodulation (2x 20W/side)	-	-	-	TBD
Lightning Surge Handling at Ant port	-	-	-	> 10 kA (TBC)

Low-band to Antenna Response

Passband 1 Insertion Loss (5 MHz avg)	1710-1780	ESTIMATES Not final	<0.6 dB max
Passband 2 Insertion Loss (5 MHz avg)	2110-2180		<0.6 dB max
Passband 1 Return Loss	1710-1780		18-20 dB min TBC
Passband 2 Return Loss	2110-2180		18-20 dB min TBC
Attenuation:	1850-1995		>40 dB min

High-band to Antenna Response

Passband Insertion Loss (5 MHz avg)	1850-1995	<0.6 dB max
Passband Return Loss	1850-1995	18-20 dB min TBC
Attenuation:	1710-1780	>40 dB min
	2110-2180	>40 dB min

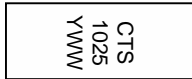
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

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

