

### **Product Brief**





## CDX0740A - PRELIMINARY Band 7 and 40 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 PCB mounting or with various connectors including SMA, SMP-Max, and other options.

# Part Dimensions: ESTIMATE 50 × 28.5 × 12.5 mm •

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#### **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 (2x20W/side)	-	-	-	TBD
Lightning Surge Handling at Ant port	-	-	-	> 10 kA (TBC)
Low-band to Antenna Response			ESTIMATES	
Passband Insertion Loss (5 MHz avg)	2300 - 2400		Not final	<0.6 dB max
Passband Return Loss	2300 - 2400			18-20 dB min TBC
Attenuation:	2500 - 2690			>40 dB min
High-band to Antenna Response				
Passband Insertion Loss (5 MHz avg)	2500 - 2690			<0.6 dB max
Passband Return Loss	2500 - 2690			18-20 dB min TBC
Attenuation:	2300 - 2400			>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



#### **PRELIMINARY - CDX0740A**

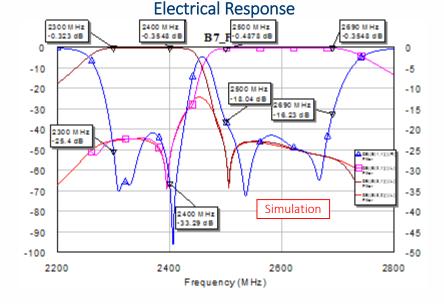
Band 7 and 40 ClearPlex Diplexer

#### PCB Layout (Top-Down View)

#### Packaging and Marking

CTS 740 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.