

DPX0528E

Band 5+8 vs subset of 28 DPX Series Diplexer

Features

- Frequency combining of closely spaced frequency bands
- Able to use for Band 5 or 8
- Able to use for Band 12, 13, 17 or subset of Band 28
- Superior power handling and reliability
- Universal footprint across all DPX series products



Applications

- Wireless Infrastructure applications
- Multi-band Pico Cells, Femto-cells, Repeaters and indoor DAS systems for up to 1.0W/band at the antenna port.

Part Dimensions: 34.0 × 12.0 × 6.6 mm • 11.3 g
Materials: Ag plated ceramic block

Description

Surface mount ceramic diplexer supports a universal footprint across all DPX series products enabling the use of a common system PCB. Provides superior rejection, insertion loss, reliability, and power handling.

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	-	-	-	3.0 Watt max
Peak Input Power	-	-	-	30 Watt max

Low-Band to Antenna Response

Passband Insertion Loss	698-788		1.6 dB max	1.6 dB max
Passband Return Loss	698-788	11 dB	10 dB min	10 dB min
Attenuation:	824-960			20 dB min

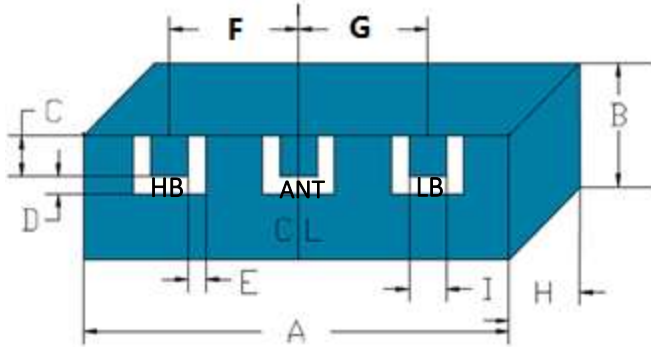
High-Band to Antenna Response

Passband Insertion Loss	824-960		1.6 dB max	1.6 dB max
Passband Return Loss	824-960	11 dB	10 dB min	10 dB min
Attenuation:	698-788			30 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.

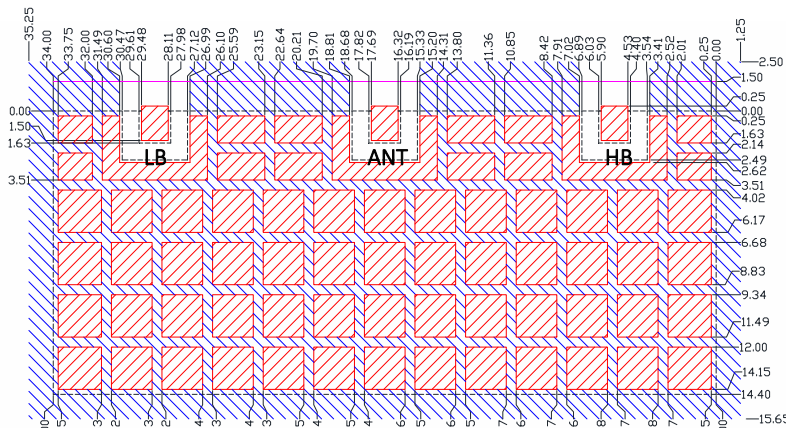
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	34.0	Max
B	12.0	Max
C	1.63	0.13
D	0.86	0.13
E	0.86	0.13
F	11.79	0.13
G	11.79	0.13
H	6.60	Max
I	1.63	0.13

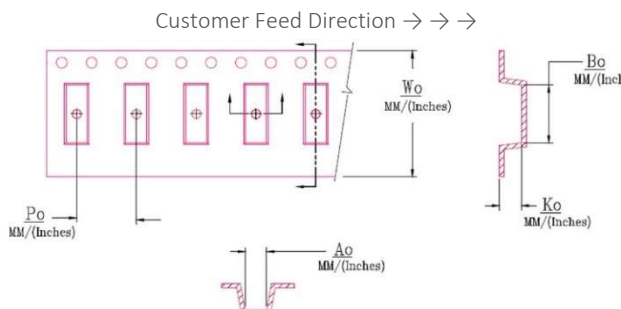
PCB Layout



- Shield
- Filter Outline
- Solder Resist Over Conductor
- Exposed Conductor
- Solder Resist Over Dielectric

Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div>CTS</div> <div>28E</div> <div>YWW</div>
Reel Weight	kg	3.8	
Reel Quantity	ea.	250	



W_0	A_0	B_0	K_0	P_0
1.732 in 44.0 mm	0.484 in 12.3 mm	1.350 in 34.3 mm	0.272 in 6.9 mm	0.787 in 20.0 mm

Electrical Response

