

DPX1313A

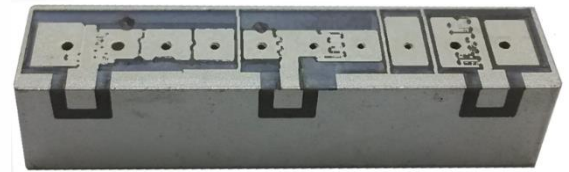
Band 12+13DL vs 13UL+26 DPX Series Diplexer

Features

- Frequency combining of closely spaced frequency bands
- 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: 31.7 × 8.1 × 7.6 mm • 12 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 (5 MHz avg)	698-756	1.5 dB	1.7 dB max	1.8 dB max
Passband Insertion Loss (single point)	698-757	1.7 dB	1.9 dB max	2.0 dB max
Passband Return Loss	698-757	12 dB	10 dB min	10 dB min
Attenuation:	776-894	23 dB	20 dB min	20 dB min

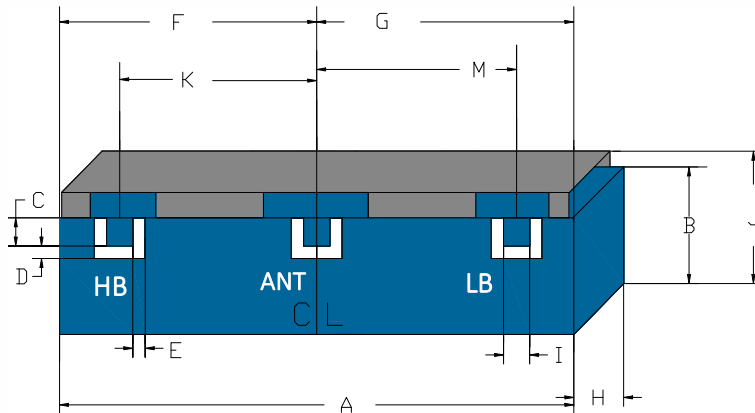
High-Band to Antenna Response

Passband Insertion Loss (5 MHz avg)	777-894	1.6 dB	1.8 dB max	1.9 dB max
Passband Insertion Loss (single point)	776-894	2.0 dB	2.2 dB max	2.3 dB max
Passband Return Loss	776-894	12 dB	10 dB min	10 dB min
Attenuation:	698-757	23 dB	20 dB min	20 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.

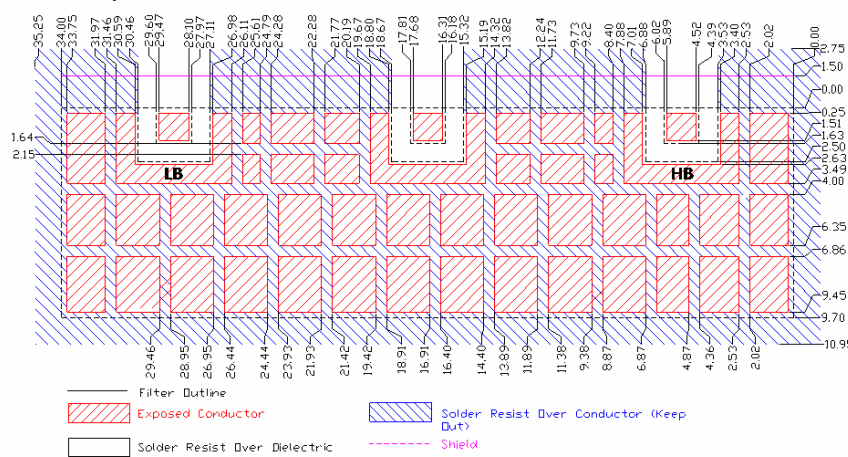
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



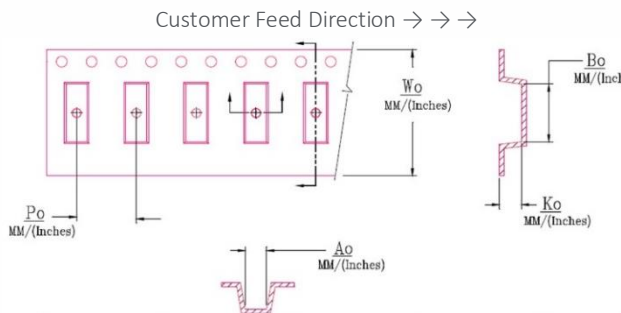
Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	31.67	Max
B	8.10	Max
C	1.63	0.13
D	0.86	0.13
E	0.86	0.13
F	15.84	0.13
G	15.84	0.13
H	7.60	Max
I	1.63	0.13
K	11.79	0.13
M	11.79	0.13

PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS 1313 YWW
Reel Weight	kg	3.8	
Reel Quantity	ea.	250	



W ₀	A ₀	B ₀	K ₀	P ₀
2.205 in 56.0 mm	0.331 in 8.4 mm	1.258 in 31.95 mm	0.311 in 7.9 mm	0.630 in 16.0 mm

Electrical Response

