

DPX1214A

Band 12 vs 14 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: 34.0 × 14.6 × 6.4 mm • 14.0 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	699-745	1.5 dB	1.8 dB max	1.8 dB max
Passband Insertion Loss (5MHz avg)	699-746	1.5 dB	1.8 dB max	1.8 dB max
Passband Return Loss	699-746	13 dB	11 dB min	11 dB min
Attenuation:	758-798	23 dB	20 dB min	20 dB min

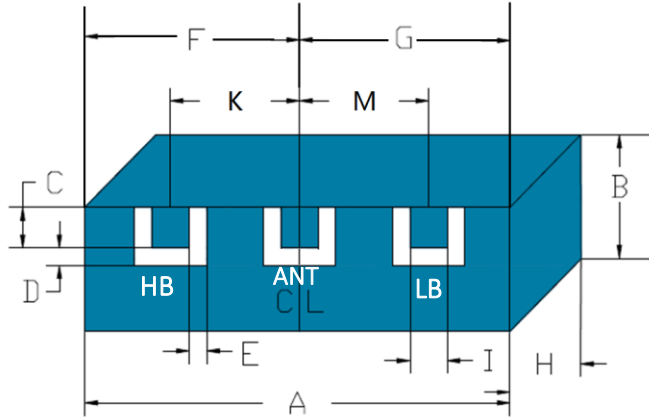
High-Band to Antenna Response

Passband Insertion Loss	758-798	1.5 dB	1.8 dB max	1.8 dB max
Passband Return Loss	758-798	13 dB	11 dB min	11 dB min
Attenuation:	699-745	23 dB	20 dB min	20 dB min
	746		14 dB min	14 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.

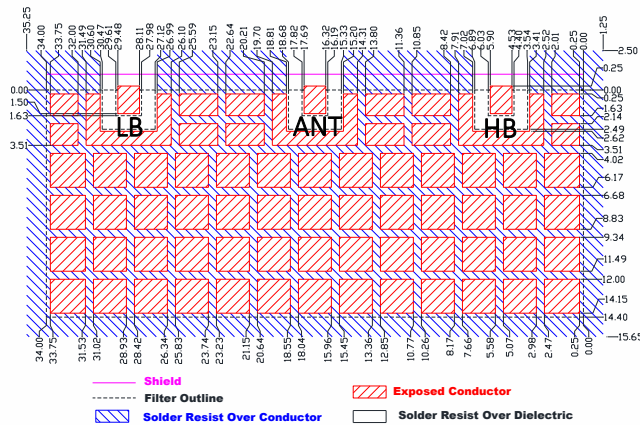
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



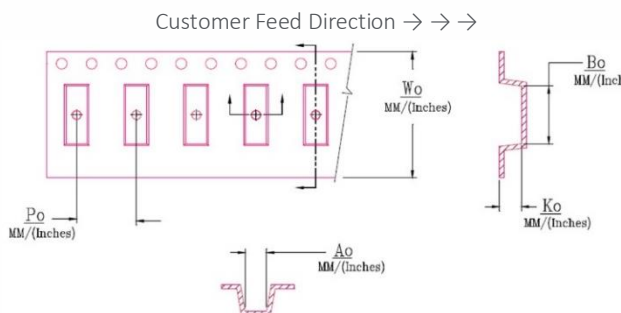
Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	34.00	Max
B	14.60	Max
C	1.63	0.13
D	0.86	0.13
E	0.86	0.13
F	16.87	0.13
G	16.87	0.13
H	6.40	Max
I	1.63	0.13
K	11.79	0.13
M	11.79	0.13

PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div> <div>CTS</div> <div>1214</div> <div>YWW</div> </div>
Reel Weight	kg	3.8	
Reel Quantity	ea.	250	



W _o	A _o	B _o	K _o	P _o
2.205 in 56.0 mm	0.587 in 14.9 mm	1.350 in 34.3 mm	0.270 in 6.85 mm	0.787 in 20.0 mm

Electrical Response

