

DPX0820A

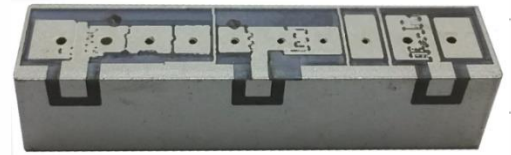
Band 8 and 20 Diplexer

Features

- Narrowband diplexing combines neighboring frequency bands.
- Superior power handling and reliability
- Universal footprint across various band combinations

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade Repeaters, DAS, and multi-band Small Cells up to 2W/band at the antenna port.



Part Dimensions: 34.0 × 10.0 × 8.0 mm • 8.6 g
Materials: Ag plated ceramic block with tin plated brass shield

Description

Surface mount ceramic diplexer supports a universal footprint across all neighboring band combinations enabling the use of a common system PCB. Provides superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other diplexer technologies.

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 port	-	-	-	3.0 Watt max
Peak Input Power per port	-	-	-	20 Watt max
Average Combined Output Power	-	-	-	5.0 Watt max
Peak Combined Output Power	-	-	-	32 Watt max

Low-band to Antenna Response

Passband Insertion Loss (5 MHz avg)	791-862	1.2 dB	1.4 dB max	1.6 dB max
Passband Return Loss	791-862	14 dB	12 dB min	12 dB min
Attenuation:	880-960	21 dB	20 dB min	20 dB min

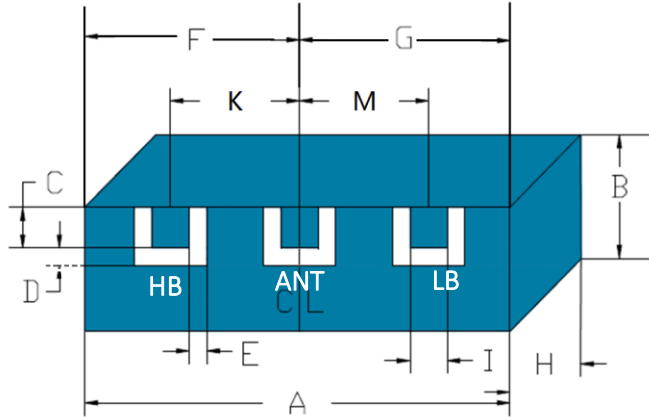
High-band to Antenna Response

Passband Insertion Loss (5 MHz avg)	880-960	1.4 dB	1.5 dB max	1.7 dB max
Passband Return Loss	880-960	14 dB	12 dB min	12 dB min
Attenuation:	791-862	21 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.

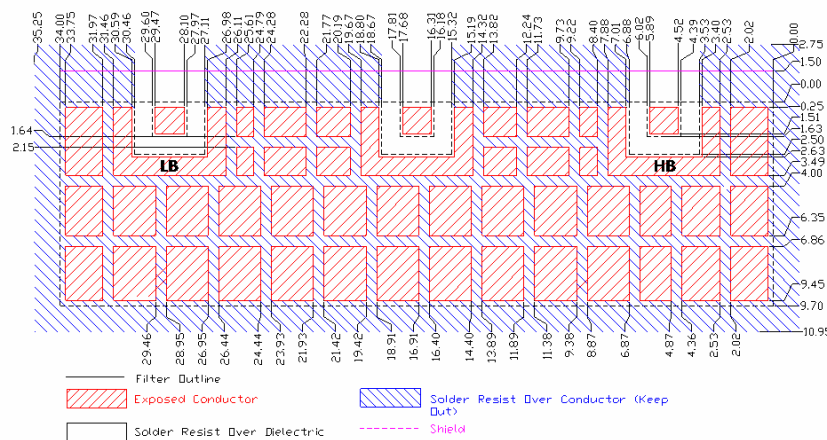
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	31.67	Max
B	7.50	Max
C	1.63	0.13
D	0.86	0.13
E	0.86	0.13
F	n/a	
G	n/a	
H	7.60	Max
I	1.63	0.13
J	9.20	Max
K	11.79	0.13
M	11.79	0.13

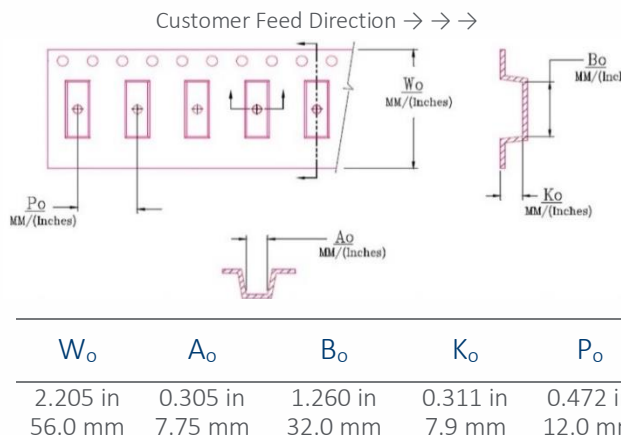
PCB Layout



Packaging and Marking

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	3.8
Reel Quantity	ea.	250

Product Marking



Electrical Response

