

DPX2628A - PRELIMINARY

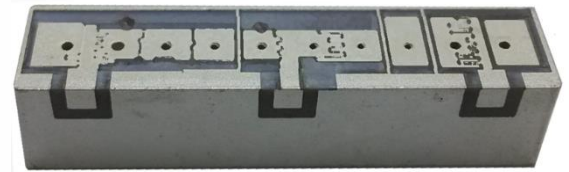
Band 26 & 8 vs 28 DPX Series Diplexer

Features

- Frequency combining of closely spaced frequency bands
- Instead of Band 28, able to use for Band 12, 13, 14, or 17
- 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 • 9.8 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	703-803	2.6 dB	2.8 dB max	3.0 dB max
Passband Return Loss	703-803	11 dB	10 dB min	10 dB min
Attenuation:	814-960	17 dB	15 dB min	15dB min

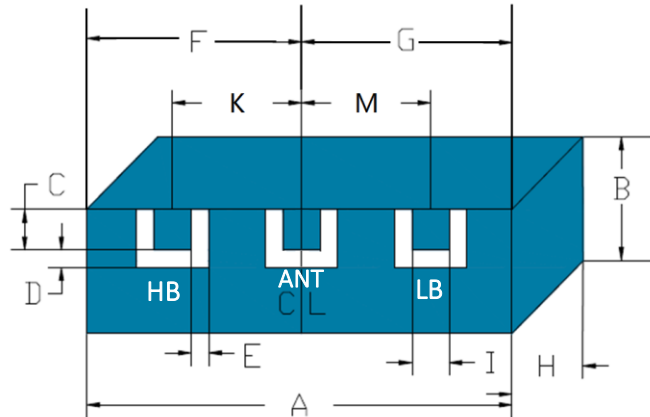
High-Band to Antenna Response

Passband Insertion Loss	814-960	2.6 dB	2.8 dB max	3.0 dB max
Passband Return Loss	814-960	11 dB	10 dB min	10 dB min
Attenuation:	703-803	17 dB	15 dB min	15 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.

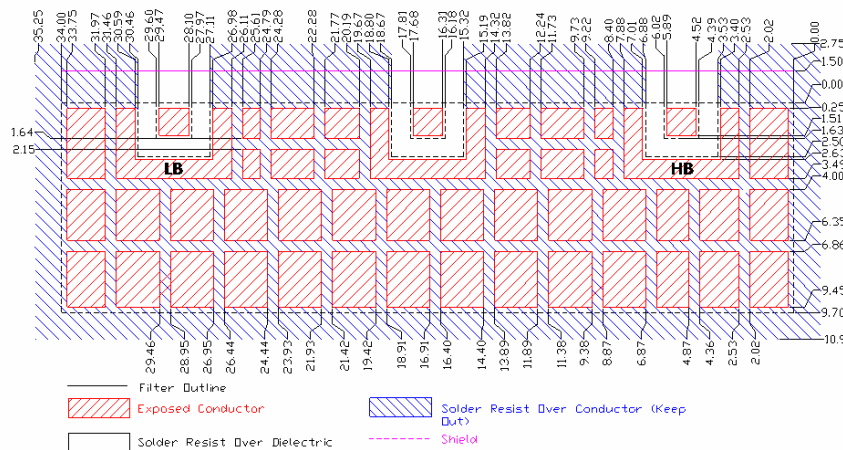
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

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



IMPORTANT: Please assure ≥ 20 mils (0.5mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the required ground plane.

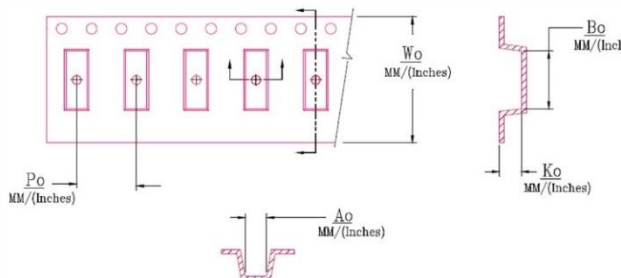
Please assure sufficient ground vias between the top metal ground plane and the primary ground plane.

Recommended solder: 4-6 mils of SAC305 with reflow incl. 120s of soak at 217°C, and up to 30 sec peak at 241°C.

Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	3.8	2628
Reel Quantity	ea.	250	YWW

Customer Feed Direction → → →



W_o	A_o	B_o	K_o	P_o
2.205 in	0.331 in	1.258 in	0.311 in	0.630 in
56.0 mm	8.4 mm	31.95 mm	7.9 mm	16.0 mm

Electrical Response

