

CER1043A

788-816 / 851-861 MHz Duplexer

Features

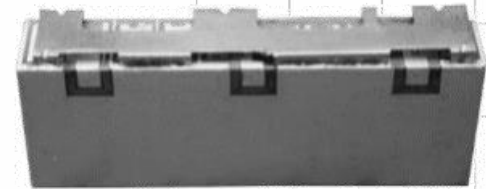
- Low Loss with High Rejection
- Superior power handling and reliability
- *Shares same basic I/O pattern as DPX family*

Applications

- Specialty wireless Infrastructure applications

Description

Surface mount ceramic diplexer for use in specialty application while remaining compatible with DPX footprint.



Part Dimensions: 33.7 × 14.3 × 6.6 mm • 13.5 g
Materials: Ag plated ceramic block with tin plated brass shield

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	-	-	-	4.0 Watt max
Peak Input Power per port	-	-	-	40 Watt max
Passive Intermodulation (2x 2W)	-	-	-	-97dBm max target

Low-band to Antenna Response

Passband Insertion Loss (single point)	788-816	1.8 dB	2.3 dB max	2.5 dB max
Passband Ripple	788-816	0.6 dB	0.8 dB max	1.0 dB max
Passband Return Loss	788-816	13 dB	12 dB max	11dB max
Attenuation:	851-861	56 dB (S21) 56 dB (S23)	52 dB min (S21) 53 dB min (S23)	51dB min (S21) 52dB min (S23)
	1576-1632	30 dB	25 dB min	25 dB min

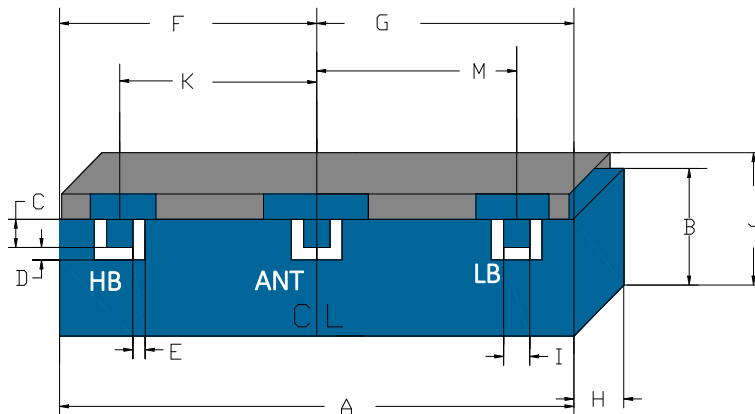
High-band to Antenna Response

Passband Insertion Loss (single point)	851-861	1.6 dB	1.8 dB max	2.0 dB max
Passband Ripple	851-861	0.5 dB	0.8 dB max	1.0 dB max
Passband Return Loss	851-861	13 dB	12 dB max	11dB max
Attenuation:	788-816	60 dB	55 dB min	54dB min
	1-787	50 dB	48 dB min	48 dB min
	1702-1722	30 dB	25 dB min	25 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.

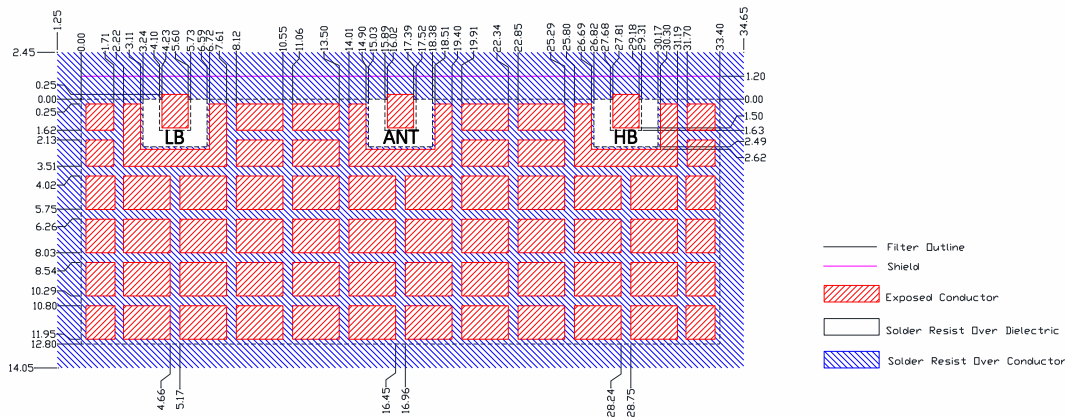
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



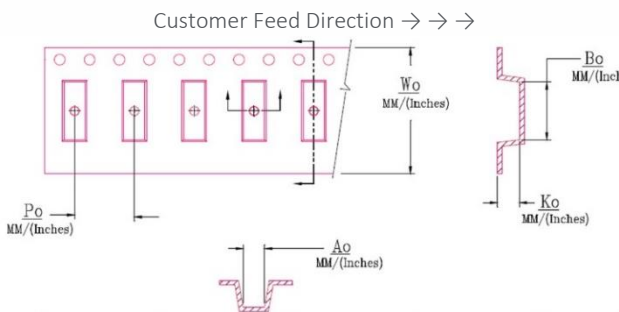
Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	33.40	0.30
B	12.80	0.50
C	1.63	0.13
D	0.86	0.13
E	0.86	0.13
F	16.87	0.13
G	16.87	0.13
H	6.56	Max
I	1.63	0.13
J	13.80	0.50
K	11.79	0.13
M	11.79	0.13

PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	3.8	043
Reel Quantity	ea.	250	YWW



W ₀	A ₀	B ₀	K ₀	P ₀
2.205 in	0.575 in	1.350 in	0.264 in	0.787 in
56.0 mm	14.6 mm	34.3 mm	6.7 mm	20.0 mm

Electrical Response

