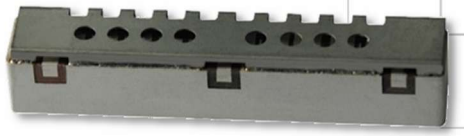
CER1154A

3450-3550 / 3570-3700 MHz Diplexer

Features

- AMBIT Band vs CBRS excl 20MHz guardband
- Low Loss with High Rejection
- Superior power handling and reliability
- Shares same footprint as USD family



Part Dimensions: 63.0 x 6.6 x 10.6 mm • ??? g
Materials: Ag plated ceramic block with fused-tin plated brass shield

Applications

- Specialty wireless Infrastructure applications
- Swapped High-Band and Low-Band ports

Description

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

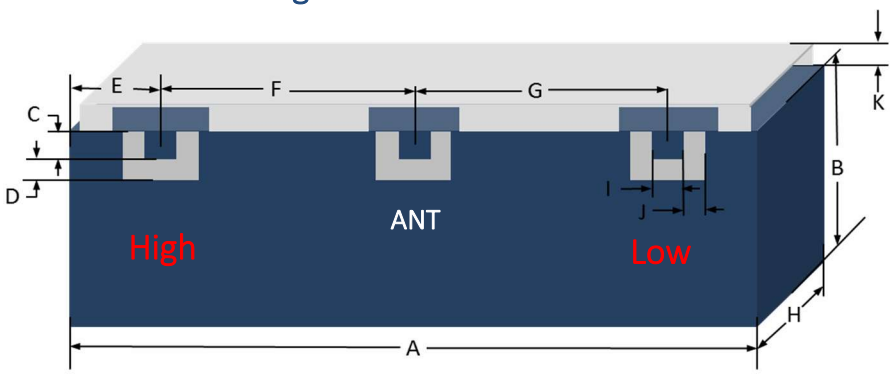
Electrical Specifications

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	-	-	-	5.0 Watt max
Peak Input Power	-	-	-	50 Watt max
Low-band to Antenna Response				
Passband Insertion Loss (10MHz avg)	3450 - 3550	2.0 dB	2.1 dB max	2.2 dB max
(10MHz avg)	3450 - **3540**	1.5 dB	1.7 dB max	1.7 dB max
Passband Ripple	3450 - 3550	1.9 dB	2.0 dB max	2.0 dB max
Passband Return Loss	3450 - 3550	12 dB	11 dB min	10 dB min
Attenuation	3570 - 3700	28 dB	25 dB min	25 dB min
High-band to Antenna Response				
Passband Insertion Loss (10MHz avg)	3570 - 3700	2.0 dB	2.1 dB max	2.2 dB max
(10MHz avg)	**3580** - 3700	1.5 dB	1.7 dB max	1.7 dB max
Passband Ripple	3570 - 3700	1.9 dB	2.0 dB max	2.0 dB max
Passband Return Loss	3570 - 3700	12 dB	11 dB min	10 dB min
Attenuation	3450 - 3550	28 dB	25 dB min	25 dB min
High-band to Low-band Response				
Attenuation for Low-band	3450 - 3550	28 dB	25 dB min	25 dB min
Attenuation for High-Band	3570 - 3700	28 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.

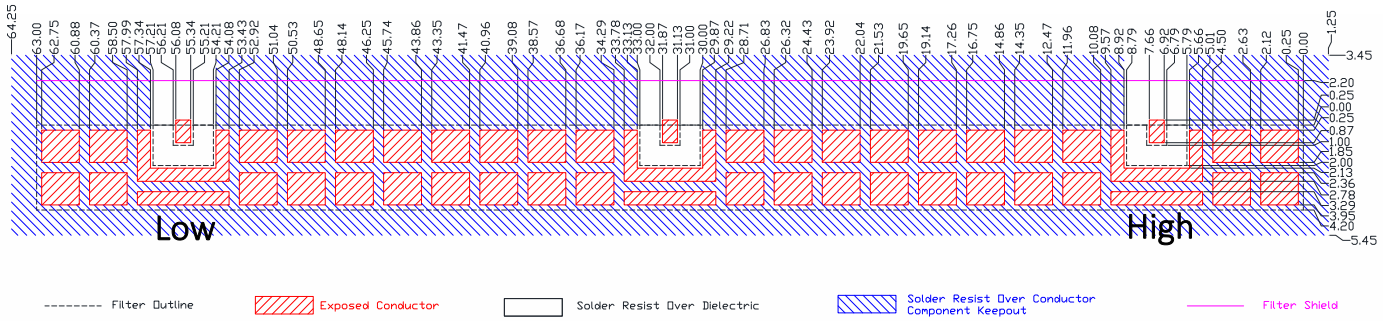
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	63.00	Max
B	4.20	Max
C	1.00	0.13
D	1.00	0.13
E	N/A	0.13
F	24.21	0.13
G	24.21	0.13
H	10.60	Max
I	1.00	0.13
J	1.00	0.13
K	2.20	0.20

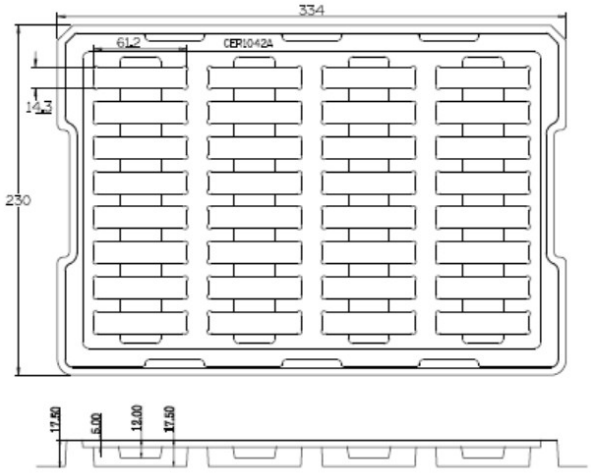
PCB Layout



Packaging and Marking

CTS 154A YYWW

Product is shipped in
Pre-formed plastic trays



The trays have 32 slots each with 1 filter per slot. Boxes are packed with 4 Trays per box for a total of 128 filters per box.

Electrical Response