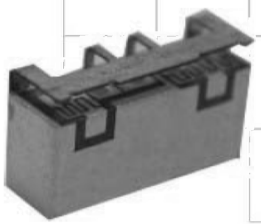
CER1084A - PRELIMINARY

5145-5285 MHz Bandpass Filter



Part Dimensions: 9.0 × 4.6 × 3.1 mm • TBD g
Materials: Ag plated ceramic block with tin plated brass shield

Features

- Low Loss with High Rejection
- Low ripple
- Compatible with MTB family footprint

Applications

- Wireless Infrastructure applications

Description

Surface mount ceramic bandpass filter. Superior rejection, insertion loss, reliability, as well as both peak and average power handling compared other bandpass filter technologies.

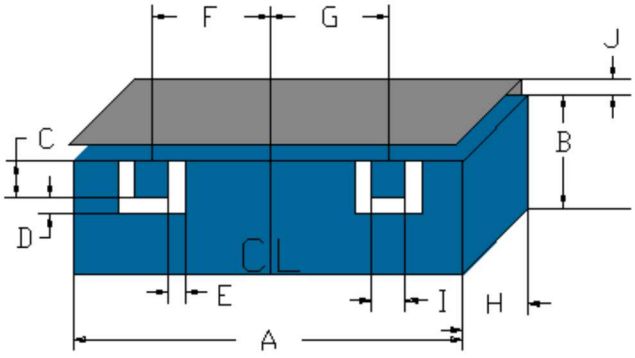
Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +105°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max
Input-Output Response				
Passband Insertion Loss (single point)	5145 - 5285	1.5 dB	1.8 dB min	2.0 dB min
Passband Ripple	5145 - 5285	0.2 dB	0.4 dB min	0.5 dB min
Passband Return Loss	5145 - 5285	12 dB	10 dB min	10 dB min
Attenuation:	1 - 4845	40 dB	35 dB min	35 dB min
	5583 - 5912	48 dB	45 dB min	45 dB min
	6000 - 7000	40 dB	35dB min	35 dB min
	7001 - 8000	30 dB	25dB 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.

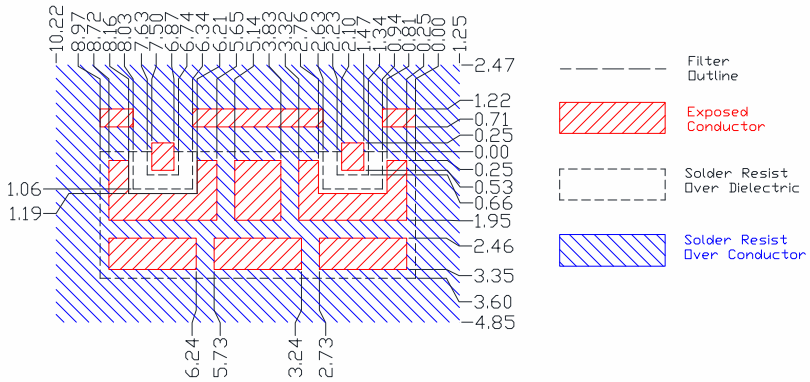
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.97	max
B	3.60	max
C	0.66	0.13
D	0.40	0.13
E	0.40	0.13
F	2.70	0.13
G	2.70	0.13
H	3.10	max
I	0.89	0.13
J	1.00	max

PCB Layout

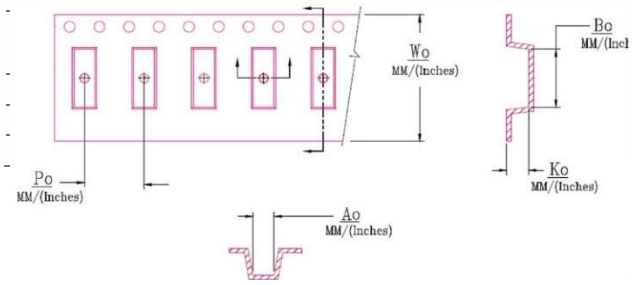


IMPORTANT: Please assure >=29.5mils (0.75mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the required ground plane.

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 including 120s of soak at 217°C, and up to 30 sec peak at 241°C.

Packaging and Marking



W_o	A_o	B_o	K_o	P_o
0.945 in	0.189 in	0.366 in	0.132 in	0.315 in
24.0 mm	4.8 mm	9.30 mm	3.35 mm	8.0 mm

Product Marking

CTS
1084
YWW

Electrical Response