CER1113A

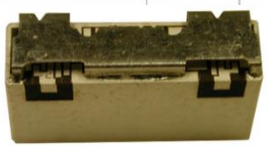
3300-4200 MHz Filter

Features

- Low Loss with High Rejection
- Low ripple

Applications

- Wireless Infrastructure applications



Part Dimensions: 16.4 × 4.8 × 5.0 mm • 1.1 g
Materials: Ag plated ceramic block with fused tin plated brass shield

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.

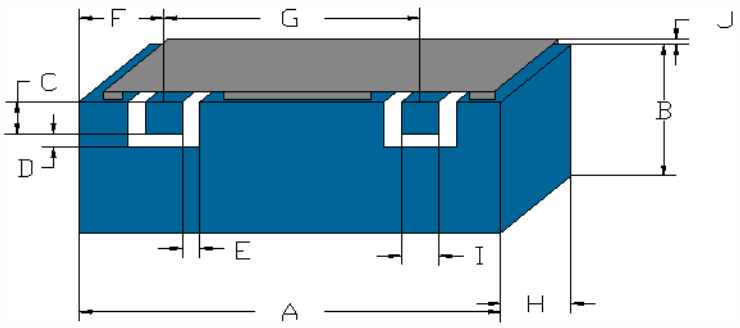
Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	1.0 Watt max
Peak Input Power	-	-	-	10 Watt max
Input-Output Response				
Passband Insertion Loss	3300-4200	1.1 dB	1.3 dB max	1.5 dB max
Passband Ripple	3300-4200	0.5 dB	1.0 dB max	1.0 dB max
Passband Return Loss	3300-4200	12 dB	10 dB min	10 dB min
Attenuation:	1470	>63 dB	60 dB min	60 dB min
	3110	23 dB	20 dB min	20 dB min
	4430	15 dB	13 dB min	13 dB min
	6220-6820	39 dB	36 dB min	36 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.

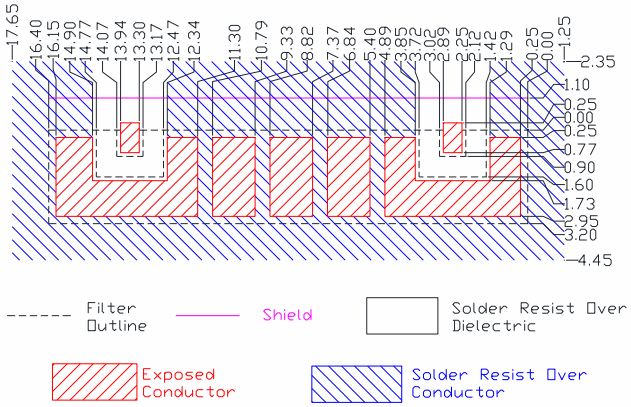
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	16.40	max
B	3.70	max
C	0.90	0.13
D	0.70	0.13
E	0.70	0.13
F	2.57	0.13
G	11.05	0.13
H	5.00	max
I	0.90	0.13
J	1.12	max

PCB Layout

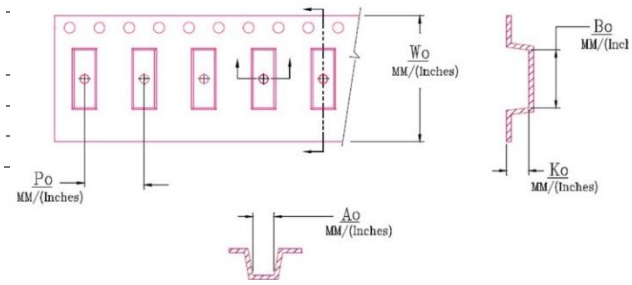


IMPORTANT: Please assure >=30mils (0.75mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the ground plane.

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 24.0 mm	0.217 in 5.5 mm	0.669 in 17.0 mm	0.206 in 5.2 mm	0.472 in 12.0 mm

Product Marking

CTS
1113
YWW

Electrical Response