



CER1048A - PRELIMINARY

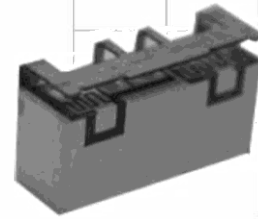
7.9-8.4 GHz Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple

Applications

- Wireless Infrastructure applications



Part Dimensions: **ESTIMATE** 9.0 × 3.0 × 3.1 mm • <0.4 g
Materials: Ag plated ceramic block with 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

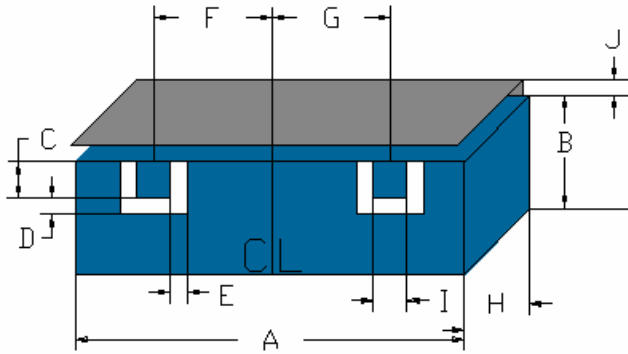
Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max
Input-Output Response				
Passband Insertion Loss (100 MHz avg)	8000 - 8400		<= 1.1 dB min EST	<= 1.2 dB min EST
Passband Insertion Loss (100 MHz avg)	7900 - 8000		<= 1.3 dB min EST	<= 1.4 dB min EST
Passband Insertion Loss (single point)	7900 - 8400		<= 1.6 dB min	<= 1.6 dB min
Passband Return Loss	7900 - 8400		>= 11.0 dB min	>= 11.0 dB min
Attenuation:	7250 - 7750		>= 20 dB min	>= 20 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

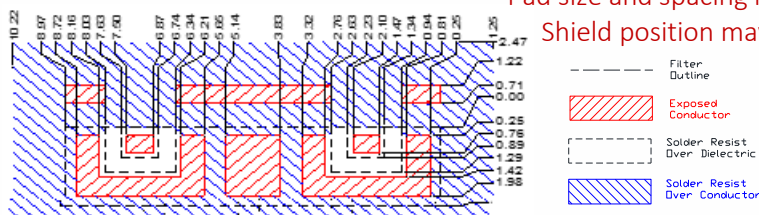
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.97	max
B	2.00 est	max
C	0.89	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



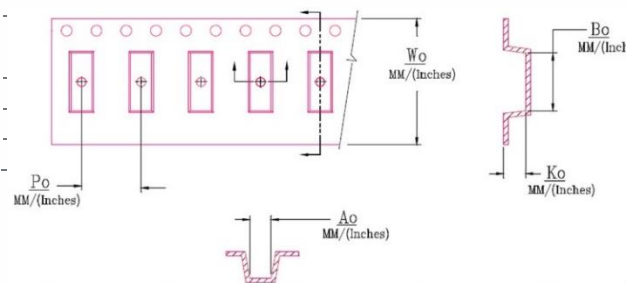
PRELIMINARY LAYOUT. NOT FINAL.

Pad size and spacing may change.

Shield position may change.

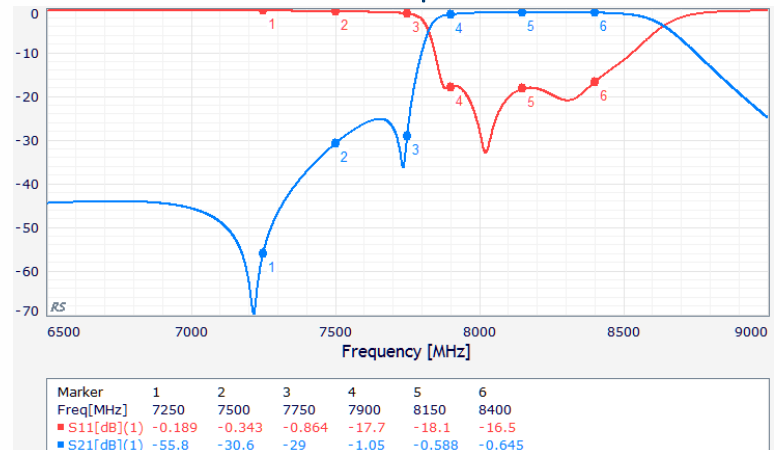
IMPORTANT: Please assure ≥ 26.6 mils (0.67mm) thickness of dielectric beneath the I/O Pads and surrounding clearance zone to the required ground plane.

Packaging and Marking



W ₀	A ₀	B ₀	K ₀	P ₀
0.945 in	0.xxx in	0.366 in	0.132 in	0.315 in
24.0 mm	x.xx mm	9.30 mm	3.35 mm	8.0 mm

Electrical Response



Product Marking

CTS
1048
YWW