



CER1085A - PRELIMINARY

5540-5680 MHz Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple

Applications

- Wireless Infrastructure applications



Part Dimensions: 15.5 × 4.1 × 4.3 mm • TBD 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 +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)	5540 - 5680	1.8 dB	2.1 dB min	2.3 dB min
Passband Ripple	5540 - 5680	0.6 dB	0.8 dB min	0.9 dB min
Passband Return Loss	5540 - 5680	12 dB	10 dB min	10 dB min
Attenuation:	1 - 5240	37 dB	34 dB min	34 dB min
	5799 - 6240	47 dB	43 dB min	43 dB min
	6500 - 8000	37 dB	30 dB min	30 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

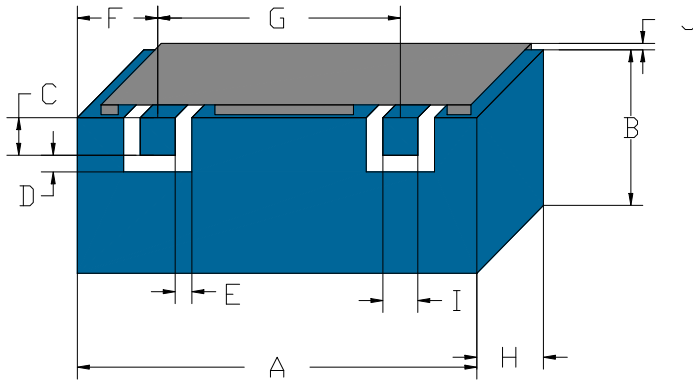
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



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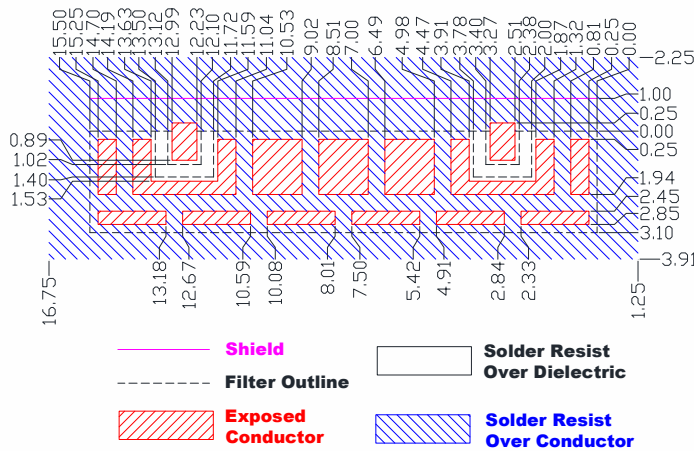
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Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	15.50	max
B	3.10	max
C	1.02	0.13
D	0.38	0.13
E	0.38	0.13
F	2.89	0.13
G	9.72	0.13
H	4.30	max
I	1.02	0.13
J	1.00	max

PCB Layout

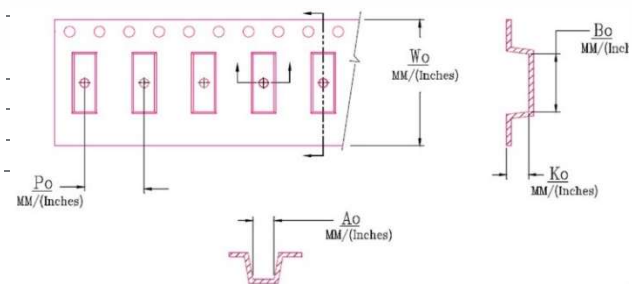


IMPORTANT: Please assure ≥ 29.5 mils (0.75mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the required ground plane.

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_0	A_0	B_0	K_0	P_0
0.945 in 24.0 mm	0.189 in 4.8 mm	0.366 in 9.30 mm	0.132 in 3.35 mm	0.315 in 8.0 mm

Product Marking

CTS
1085
YWW

Electrical Response

