CER1090A

450-470 MHz Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple

Applications

- Specialty applications

Part Dimensions: 32.5 × 17.6 × 8.3 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 -55°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	4.0 Watt max
Peak Input Power	-	-	-	40 Watt max
Input-Output Response				
Passband Insertion Loss	450-470	1.7 dB	1.8 dB max	2.0 dB max
Passband Return Loss	450-470	15 dB	14.0 dB min	14.0 dB min
Attenuation:	1 - 438	36 dB	35.0 dB min	35.0 dB min
	482 - 800	36 dB	35.0 dB min	35.0 dB min
	901 - 940	32dB	25.0 dB min	25.0 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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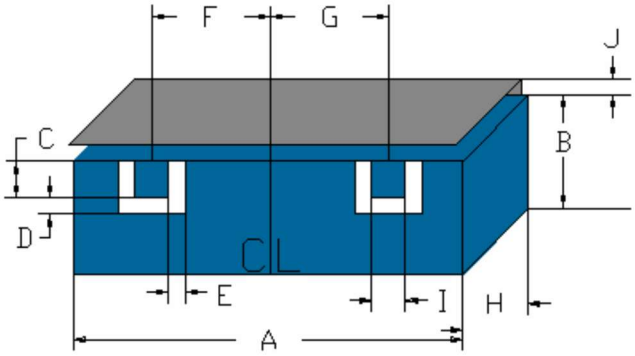
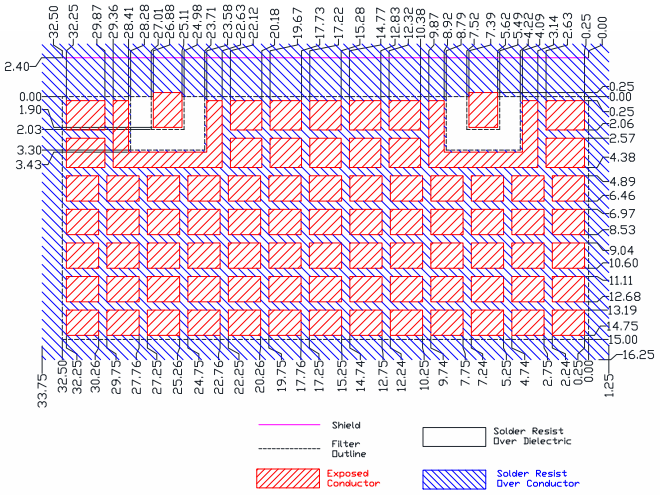
Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	32.50	max
B	15.0	max
C	2.03	0.13
D	1.27	0.13
E	1.27	0.13
F	9.75	0.13
G	9.75	0.13
H	8.30	max
I	2.03	0.13
J	2.40	0.20

PCB Layout



IMPORTANT: Please assure >=20mils (0.5mm) thickness of dielectric beneath the I/O Pads and 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: 6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.

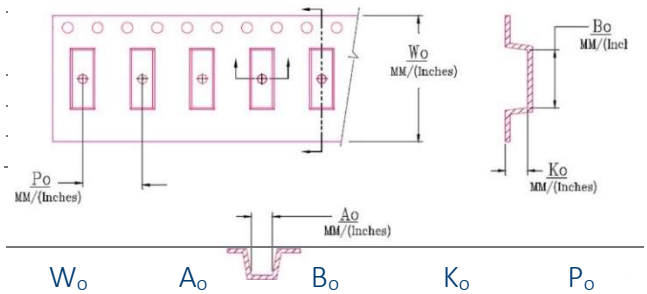
Packaging and Marking

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	5.5
Reel Quantity	ea.	500

Product Marking

CTS
1090
YWW

Customer Feed Direction → → →



W_o	A_o	B_o	K_o	P_o
2.205 in	0.602 in	1.291 in	0.344 in	0.630 in
56.0 mm	15.3 mm	32.8 mm	8.75 mm	16.0 mm

Electrical Response