

CER1101B

1160-1300 MHz Bandpass Filter

Features

- Low Loss and low Ripple with High Rejection

Applications

- Specialized L2 + L5 + E6 GPS filter



Part Dimensions: 14.7 × 5.7 × 6.2 mm • 2.1 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	1160-1300	0.8 dB	0.9 dB max	1.0 dB max
Passband Return Loss	1160-1300	14 dB	13 dB min	13 dB min
Passband Group Delay	1160-1300	6.7 ns	8 ns max	8 ns max
Group Delay Ripple (Max-Min)	1160-1300	2.5 ns	4 ns max	4 ns max
Attenuation:	790	44 dB	40 dB min	40 dB min
	960	40 dB	37 dB min	37 dB min
	1057	30 dB	28 dB min	28 dB min
	1427	20 dB	15 dB min	15 dB min
	1710	50 dB	30 dB min	30 dB min
	1937-2200	45 dB	28 dB min	28 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

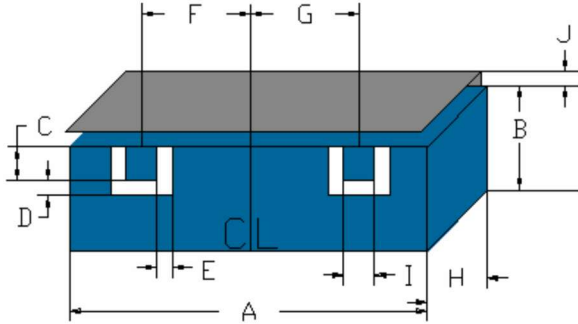
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



Preliminary - CER1101B

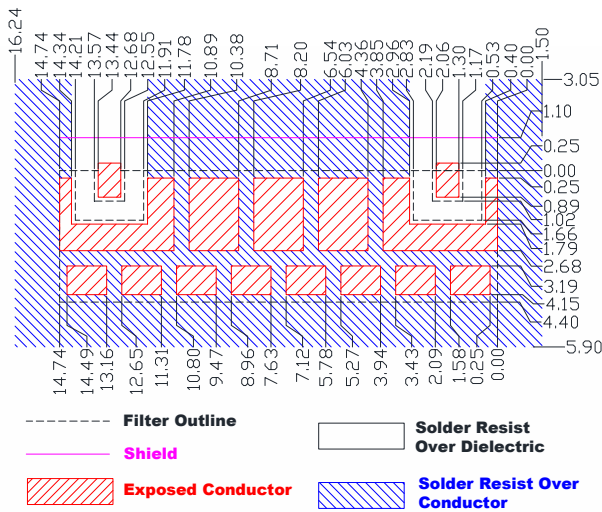
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Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	14.74	max
B	4.40	max
C	1.02	0.13
D	0.64	0.13
E	0.64	0.13
F	5.67	0.13
G	5.67	0.13
H	6.20	max
I	1.02	0.13
J	1.10	0.20

PCB Layout



IMPORTANT: Please assure ≥ 20 mils (0.5mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the required ground plane.

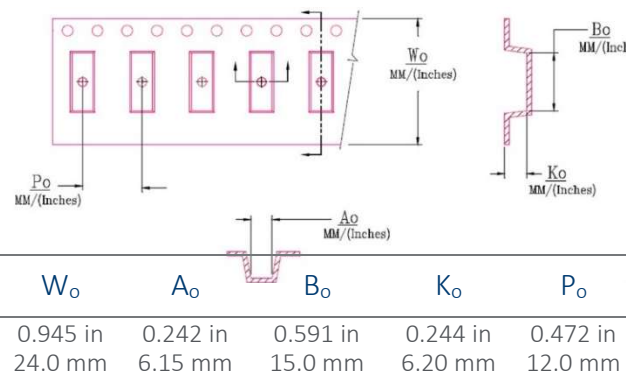
Please assure sufficient ground vias between the top metal ground plane and the primary ground plane.

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

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	???	101B
Reel Quantity	ea.	500	YWW

Customer Feed Direction → → →



Electrical Response

