





CER1106B 1530-1610 MHz Bandpass Filter

Features

Low Loss and low Ripple with High Rejection

Applications

Specialized L1 GPS filter with close-in rejection



Part Dimensions: 16.5 × 8.1 × 4.9 mm • 2.5 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

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Parameter	Frequency	Typical	Spec.	Spec. over
	(MHz)	at 25°C	at 25°C	-55°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	15301544	3.7 dB	3.8 dB max	4.1 dB max
	1610			
Passband Return Loss	1530 1544 -	15 dB	14 dB min	13 dB min
	1610			
Group Delay over Passband	1530 1544 -	42 ns	44 ns max	45 ns max
	1610			
Group Delay Ripple (Max-Min over passband)	1530 1544 -	24 ns	32 ns max	32 ns max
	1610			
Attenuation:	1350	45 dB	40 dB min	40 dB min
	1429	42 dB	40 dB min	40 dB min
	1504 1518	30 31 dB	25 dB min	25 dB min
	1522 1536	13 18 dB min	10 17 dB min	<mark>1017 dB min</mark>
	·		·	
	1626	18 32 dB	1625 dB min	16 25 dB min
	1680	3941 dB	3738 dB min	37 38 dB min
	1900	49 dB	40 dB min	40 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			

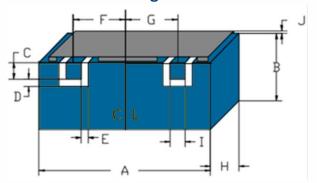
2021-08-06 Rev. A – MOD VER WWW.ctscorp.com Page 1 of 2





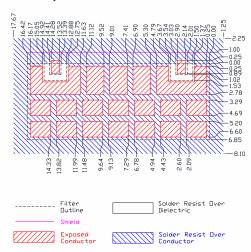
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Mechanical Drawing



Nominal Tolerance Dim. (±mm or Max) (mm) Α 16.42 max В 6.85 max C 1.02 0.13 D 0.51 0.13 Ε 0.51 0.13 F 5.69 0.13 G 5.69 0.13 Н 4.85 max 1.02 0.13 J 1.00 0.20

PCB Layout



IMPORTANT: Please assure >=20mils (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

