



CER1096A

1525-1606 MHz Bandpass Filter

Features

- L1 band with Iridium Rejection

Applications

- Specialty GNSS application

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.



Part Dimensions: 16.5 × 8.1 × 4.9 mm • 2.5 g
Materials: Ag plated ceramic block with tin plated brass shield

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	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max

Input-Output Response

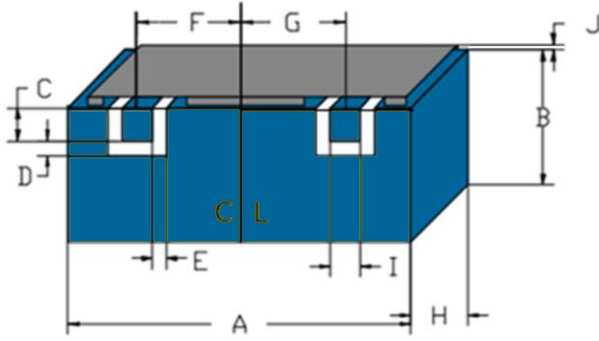
Passband Insertion Loss	1525-1606	4.5 dB	5.1 dB max	5.3 dB max
Passband Ripple	1525-1606	3.5 dB	4.0 dB max	4.2 dB max
Passband Return Loss	1525-1606	12 dB	10 dB min	10 dB min
Attenuation:	1 - 1500	34 dB	30 dB min	30 dB min
	1616-1617	29 dB	26 dB min	24 dB min
	1618-2200	31 dB	28 dB min	28 dB min

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.

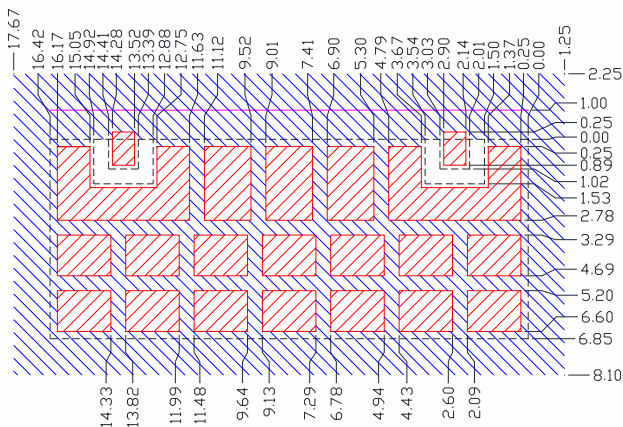
Specification Allowance

Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



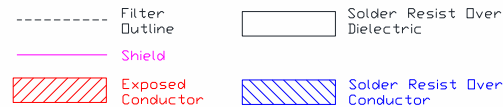
PCB Layout



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.

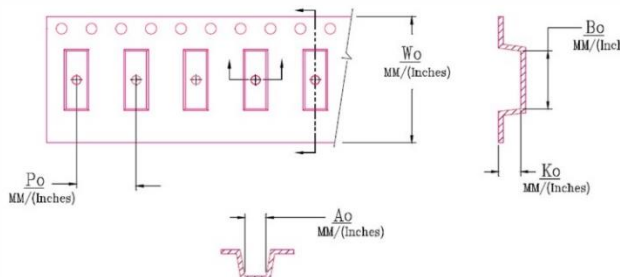
Recommended solder: 4-6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	???	1096
Reel Quantity	ea.	500	YWW

Customer Feed Direction → → →



W_0	A_0	B_0	K_0	P_0
1.260 in 32.0 mm	0.323 in 8.2 mm	0.657 in 16.7 mm	0.201 in 5.1 mm	0.630 in 16.0 mm

Electrical Response

