



CER1221A - preliminary

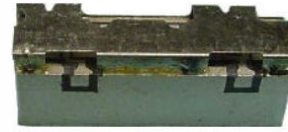
1616-1626.5 MHz Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple

Applications

- Primarily for Iridium applications



Part Dimensions: 15.5 × 7.7 × 4.3 mm • <2 g **EST**

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

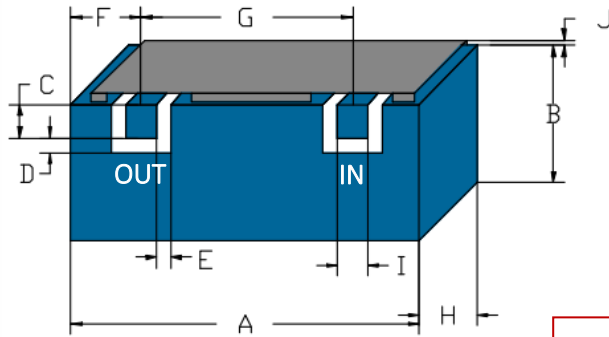
Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -55°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max
Input-Output Response				
Passband Insertion Loss	1616-1626.5	3.8 dB	4.0 dB max	4.2 dB max
Passband Ripple	1616-1626.5	0.8 dB	1.1 dB max	1.2 dB max
Passband Return Loss	1616-1626.5	13 dB	12.0 dB min	12.0 dB min
Attenuation:	1596	23 dB	22.0 dB min	22.0 dB min
	1605	17 dB	16.0 dB min	15.0 dB min
	1636	17 dB	16.0 dB min	15.0 dB min
	1646.5	24 dB	22.0 dB min	22.0 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

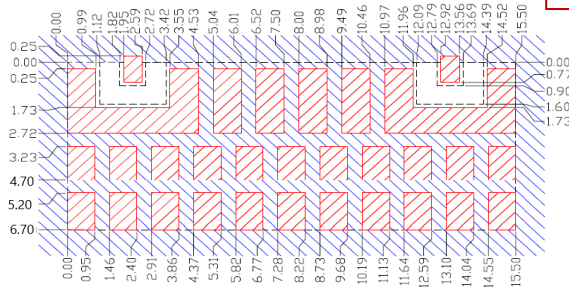
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	15.50	max
B	<=6.70	max
C	0.90	0.13
D	0.70	0.13
E	0.70	0.13
F	n/a	
G	10.97	0.13
H	4.30	max
I	0.90	0.13
J	1.00	max

PCB Layout



Layout not final;
Subject to Change

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.

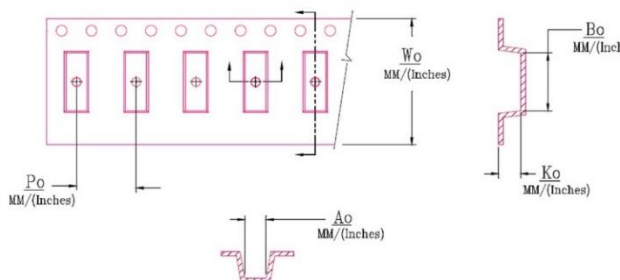
Recommended solder: 6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	5.5	1221
Reel Quantity	ea.	500	YWW

Customer Feed Direction → → →



W ₀	A ₀	B ₀	K ₀	P ₀
2.205 in 56.0 mm	0.378 in 9.6 mm	1.291 in 32.8 mm	0.344 in 8.75 mm	0.630 in 16.0 mm

Electrical Response

