CER1105A

1544-1610 MHz Bandpass Filter

Features

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Applications

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Part Dimensions: 21.6 × 8.0 × 4.0 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.

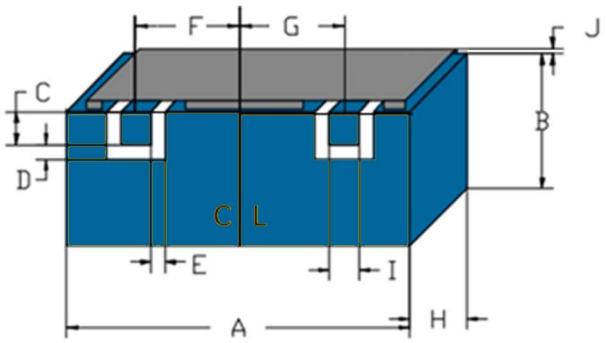
Electrical Specifications

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	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max
Input-Output Response				
Passband Insertion Loss	1544-1610	5.0 dB	5.1 dB max	5.3 dB max
Passband Return Loss	1544-1610	15 dB	14 dB min	14 dB min
Group Delay over Passband	1544-1610	48 ns	52 ns max	54 ns max
Group Delay Ripple (Max-Min over passband)	1544-1610	29 ns	33 ns max	35 ns max
Attenuation:	1350	60 dB	40 dB min	40 dB min
	1429	55 dB	40 dB min	40 dB min
	1518	35 dB	25 dB min	25 dB min
	1536	21.5 dB	20 dB min	20 dB min
	1626	30 dB	27 dB min	27 dB min
	1680	50 dB	40 dB min	40 dB min
	1900	TBD dB	55 dB min	55 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.

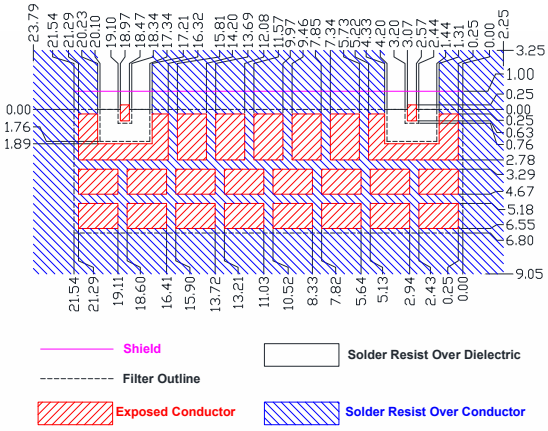
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	21.54	max
B	6.80	max
C	0.76	0.13
D	1.00	0.13
E	1.00	0.13
F	7.95	0.13
G	7.95	0.13
H	4.00	max
I	0.76	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.

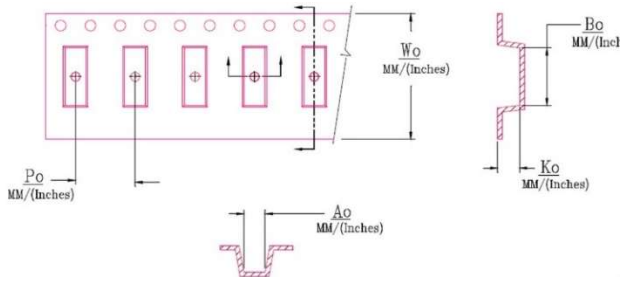
Packaging and Marking

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

Product Marking

CTS
1105
YWW

Customer Feed Direction → → →



W_o	A_o	B_o	K_o	P_o
1.732 in 44.0 mm	0.323 in 8.2 mm	0.865 in 21.97 mm	0.165 in 4.19 mm	0.630 in 16.0 mm

Electrical Response