



# CER1138B

## 1177-1257MHz Bandpass Filter

### Features

- Low and tightly-controlled GDV
- Low loss which providing consistent rejection

### Applications

- Specialty applications

### Description

Surface mount ceramic bandpass filter with superior product uniformity, group delay, rejection, insertion loss, reliability, as well as both peak and average power handling compared other bandpass filter technologies.

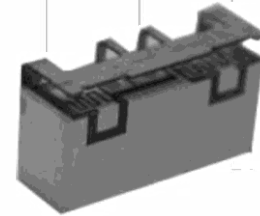
### Electrical Specifications

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	1177-1257	1.4 dB	1.6 dB max	1.8 dB max
	<b>1207-1227</b>	1.1 dB	1.3 dB max	1.5 dB max
Passband Return Loss	1177-1257	14 dB	12 dB min	12 dB min
Group Delay Variation (max-min)	<b>1207-1227</b>	0.4 ns	0.7 ns max	0.7 ns max
Attenuation:	1- <b>1117</b>	22 dB	20 dB min	20 dB min
	<b>1317-2000</b>	22 dB	20 dB min	20 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

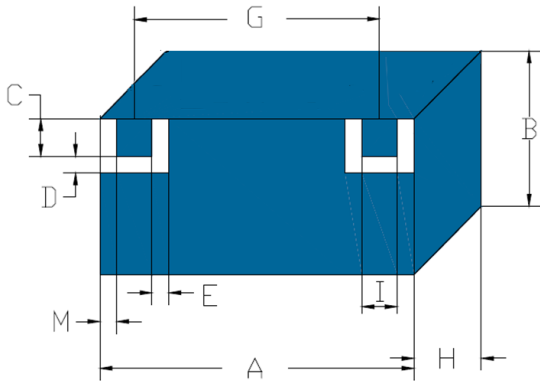
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



Part Dimensions: 10.0 × 5.3 × 4.0 mm • < 1 g

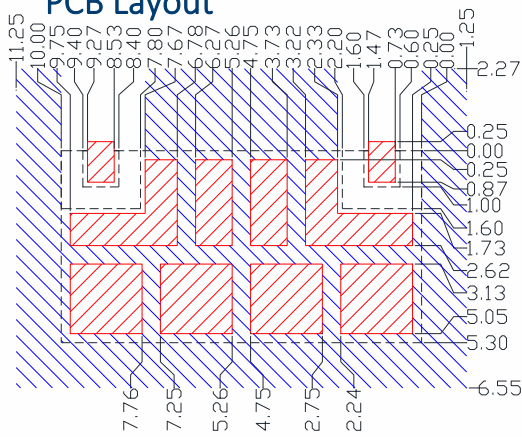
Materials: Ag plated ceramic block

### Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	10.00	max
B	5.30	max
C	1.00	0.13
D	0.60	0.13
E	0.60	0.13
G	7.80	0.13
H	4.00	max
I	1.00	0.13
M	0.55	0.20

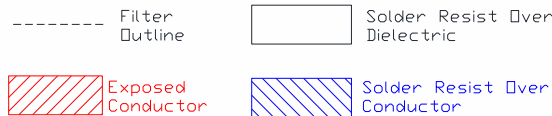
### PCB Layout



IMPORTANT: Please assure  $\geq 20$  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.

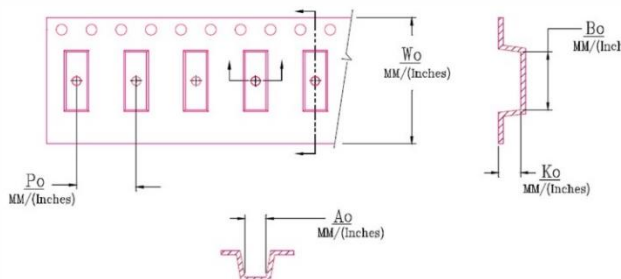
Recommended solder: 4-6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.



### Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	1.6	138B
Reel Quantity	ea.	1000	YYWW

Customer Feed Direction → → →



$W_0$	$A_0$	$B_0$	$K_0$	$P_0$
0.945 in 24.0 mm	0.217 in 5.50 mm	0.406 in 10.30 mm	0.169 in 4.30 mm	0.472 in 12.0 mm

### Electrical Response

