

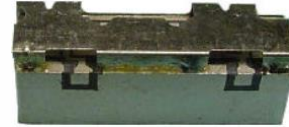


# CER1120A

## 1525-1609 MHz Bandpass Filter

### Features

- Variant of CER0934A with integrated shield added and lower IL at 1609MHz while relaxing rejection at 1626.5MHz
- 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 fused-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

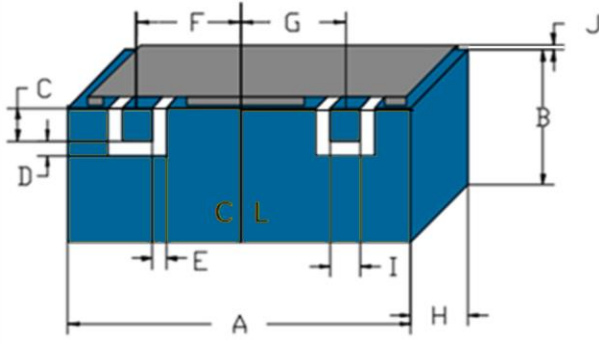
#### Input-Output Response

Passband Insertion Loss	1525-1609	2.5 dB	2.7 dB max	2.9 dB max
Passband Ripple	1525-1609	2.0 dB	2.3 dB max	2.5 dB max
Passband Return Loss	1525-1609	14 dB	12 dB min	12 dB min
Attenuation:	1626.5	30 dB	29 dB min	27 dB min

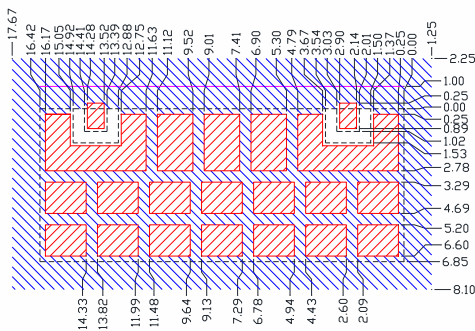
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

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

### Mechanical Drawing



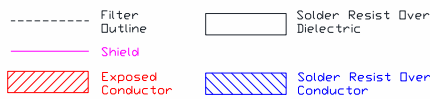
### PCB Layout



**IMPORTANT:** Please assure  $\geq 20$  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.

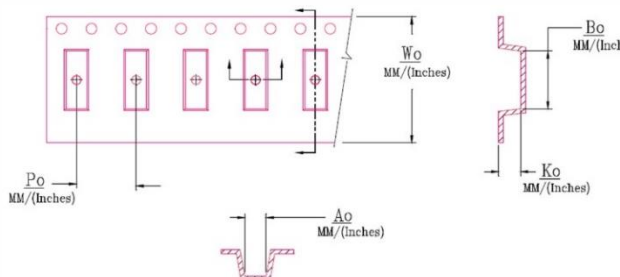
Recommended solder: 4-6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.



### Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div style="border: 1px solid black; padding: 5px; display: inline-block;">           CTS 1120 YWW         </div>
Reel Weight	kg	3.2	
Reel Quantity	ea.	500	

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

