

# **CER1202A**

## 902-928 MHz Bandpass Filter

#### **Features**

- Excellent rejections
- Low Loss
- Low Ripple

#### **Applications**

Developed for use in 900MHz ISM applications



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	902-928	2.4 dB	2.6 dB max	2.8 dB max
Passband Ripple	902-928	0.8 dB	1.3 dB max	1.4 dB max
Passband Return Loss	902-928	14 dB	12 dB min	12 dB min
Attenuation:	1-849	45 dB	30 dB min	30 dB min
	1100-1600	35 dB	30 dB min	30 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.

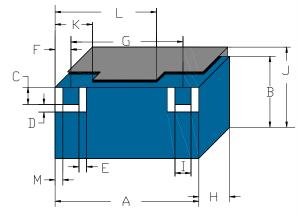
Specification Allowance					
Insertion Loss	0.1 dB				
Return Loss	1.0 dB				
Attenuation	1.0 dB				



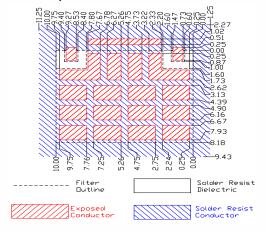


902-928 MHz Bandpass Filter

#### **Mechanical Drawing**



## PCB Layout



#### Nominal Tolerance Dim. (±mm or Max) (mm) Α 10.00 max В 7.80 max C 1.00 0.13 D 0.60 0.13 Ε 0.60 0.13 F 1.20 0.13 G 7.80 0.13 Н 4.10 max 1 1.00 0.13 J 8.80 max Κ 2.54 0.20 L 7.40 0.20 M 0.55 0.20

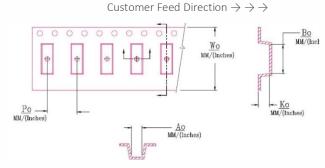
IMPORTANT: Please assure >=20mils (0.5mm) thickness of dielectric beneath the I/O Pads <u>and</u> the surrounding clearance zone down to the required ground plane.

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	3.2	1202	
Reel Quantity	ea.	500	YWW	
			_	



$W_{o}$	$A_{o}$	Bo	Ko	Po
0.945 in	0.382 in	0.406 in	0.165 in	0.623 in
24.0 mm	9.7 mm	10.3 mm	4.2 mm	16.0 mm

## **Electrical Response**

