





# **CER1060A - Preliminary** 574-694MHz Bandpass Filter

#### **Features**

Low Loss with High Rejection

#### 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.



Part Dimensions:  $16.7\times11.0\times4.8~\text{mm}$  • 4.1~g Materials: Ag plated ceramic block with tin plated brass shield

## **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	574 - 694	1.4 dB	1.8 dB max	2.0 dB max
Passband Ripple	574 - 694	0.8 dB	1.0 dB max	1.1 dB max
Passband Return Loss	574 - 694	12.0 dB	10.0 dB min	10.0 dB min
Attenuation:	490	60 dB	50.0 dB min	50.0 dB min
	520	50 dB	25.0 dB min	25.0 dB min
	760	35 dB	25.0 dB min	25.0 dB min
	810	52 dB	45.0 dB min	45.0 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

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### **Mechanical Drawing**

- I

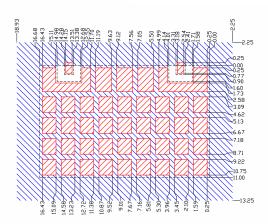
# Preliminary - CER1060A

574-694MHz Bandpass Filter

Dim.	Nominal (mm)	Tolerance (±mm or Max)
А	16.68	max
В	11.00	max
С	0.90	0.13
D	0.70	0.13
Е	0.70	0.13
F	5.485	0.13
G	5.485	0.13
Н	4.80	max
I	0.90	0.13

#### **PCB Layout**

#### Mechanicals and PCB layout modified based on actually shipped parts



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.

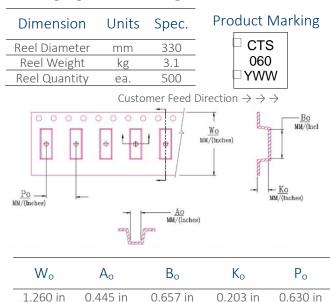
Recommended solder: 4-6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.



# Packaging and Marking

32.0 mm

11.3 mm



16.7 mm

5.15 mm

# **Electrical Response**



16.0 mm