





## CER1135A - PRELIMINARY

5727-5821.5 MHz Bandpass Filter

### **Features**

Custom performance

## **Applications**

Specialized radio filter



Part Dimensions: 15.5 × 3.7? × 4.3 mm • 4.7g

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	5727-5821.5	4.8 dB	5.3 dB max	5.5 dB max
Passband Return Loss	1166-1250	15 dB	12 dB min	12 dB min
Attenuation:	1 - 5650		40 dB min	40 dB min
	5694	19 dB	17 dB min	15 dB min
	5875	16 dB	14 dB min	12 dB min
	5960-6200	48 dB	40 dB min	40 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			

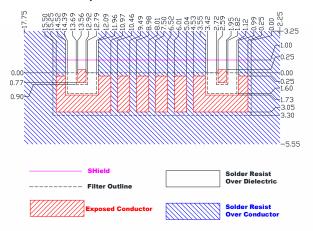
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## **Mechanical Drawing**

## D A H

## **PCB Layout**



## Preliminary - CER1135A

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Dim.	Nominal (mm)	Tolerance (±mm or Max)
Α	15.50	max
В	3.30	max
С	0.90	0.13
D	0.80	0.13
Е	0.80	0.13
F	5.485	0.13
G	5.485	0.13
Н	4.30	max
	0.90	0.13
J	1.00	max

IMPORTANT: Please assure >=30mils (0.75mm) 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.

**Electrical Response** 

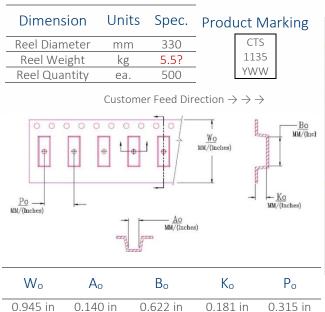
5725

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

3.55 mm

24.0 mm



15.8 mm

4.60 mm

8.0 mm

# -10 -20 -30 -40 -50 -60 -70 RS 5100 5300 5500 5700 5900 6100 6300 Frequency [MHz]

5775

5821.5 5823.5 5873

5960

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Marker Freq[MHz]

5650