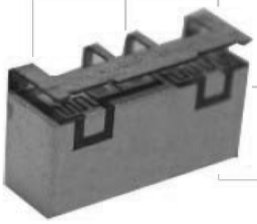
UPB652A - PRELIMINARY

5.925-7.125 GHz UPB Series Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple
- Universal footprint across family for all TDD bands



Part Dimensions: 9.0 × 4.0 × 3.1 mm • 0.4 g
Materials: Ag plated ceramic block with tin plated brass shield

Applications

- Wireless Infrastructure applications

Description

Surface mount ceramic bandpass filter supports a universal footprint across all TDD frequency bands enabling the use of a common system PCB. 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 -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 (20 MHz avg)	5925-7125			1.5 dB max
Passband Return Loss	5925-7125			10-12 dB min
Attenuation:	1-5000			40 dB min
	5150-5350			28-30 dB min
	5351-5750			18-20 dB min
	7800-9999			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

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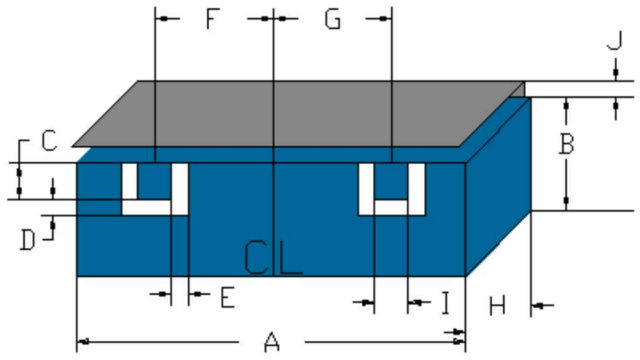
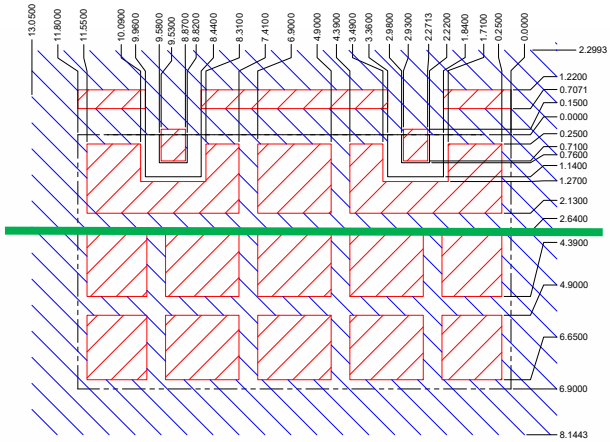
Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.97	max
B	<3.00	max
C	0.76	0.13
D	0.38	0.13
E	0.38	0.13
F	3.30	0.13
G	3.30	0.13
H	3.10	max
I	0.76	0.13
J	1.00	max

PCB Layout



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

Filter Outline
Exposed Conductor
Solder Resist over Conductor (Keep out Area)
Solder Resist Over Dielectric

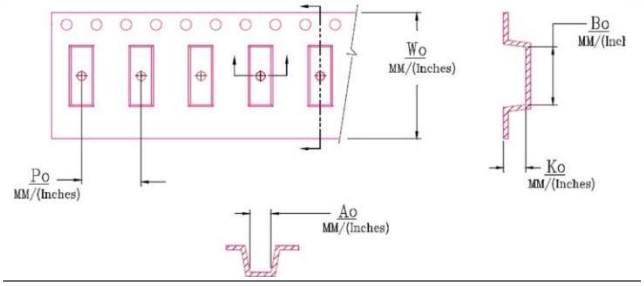
Packaging and Marking

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	5.5
Reel Quantity	ea.	500

Product Marking

CTS
652
YWW

Customer Feed Direction → → →



Wo	Ao	Bo	Ko	Po
0.945 in 24.0 mm	0.177 in 4.50 mm	0.366 in 9.30 mm	0.132 in 3.35 mm	0.315 in 8.0 mm

Electrical Response