





UPB350A

3.3-3.8 GHz UPB Series Bandpass Filter

Features

- Companion to UPB360A
- Low Loss and low ripple with High Rejection
- Universal footprint across family for all TDD bands

Applications

Wireless Infrastructure applications

Part Dimensions: 10.3 × 4.7 × 4.1 mm • 0.6 g

Materials: Ag plated ceramic block with tin plated brass shield

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)	3300-3800	0.9 dB	1.1 dB max	1.2 dB max
Passband Insertion Loss (single point)	3300-3800	1.1 dB	1.3 dB max	1.5 dB max
Passband Ripple	3300-3800	0.6 dB	0.7 dB	0.9 dB max
Passband Return Loss	3300-3800	14 dB	11 dB min	11 dB min
Attenuation:	1-2700	46 dB	43 dB min	43 dB min
Accertation.				

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				
0.1 dB				
1.0 dB				
1.0 dB				

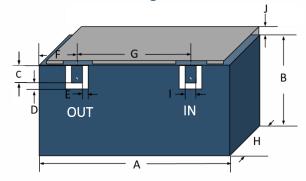
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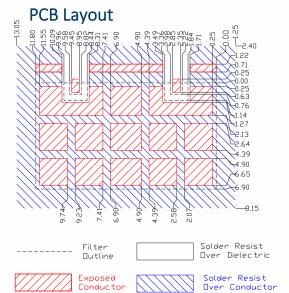




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Mechanical Drawing





Nominal Tolerance Dim. (±mm or Max) (mm) Α 10.10 0.20 В 3.20 0.30 C 0.76 0.13 D 0.38 0.13 Ε 0.38 0.13 F 1.80 0.13 G 6.60 0.13 Н 4.10 max 0.76 0.13 1.00 0.20

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.

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.

NOTE: A width of 9.50mm is necessary to support frequencies as low as 1885MHz for Band 39. If only higher frequency TDD bands are supported, then this smaller space can be allocated on the layout.

Packaging and Marking

Dimensio	n Units	Spec.	Product	Marking			
Reel Diamet		330		CTS 50			
Reel Weigh	nt kg	5.5					
Reel Quanti	ty ea.	500	YV	VW			
Customer Feed Direction \rightarrow \rightarrow							
000	00000	000	1	Bo			
•	ф †		Wo MM/(Inches)	MM/(Incl			
Po MM/(Inches)	-			MM/(Inches)			
MM/(linches)							
W_o	A_{o}	Bo	Ko	Po			
0.945 in	0.197 in	0.405 in	0.169 in	0.315 in			

10.30 mm

4.30 mm

24.0 mm

5.00 mm

Electrical Response -10 -20 -30 -40 -50 -60 -70 RS 2500 3000 3500 4000 4500 5000 5500 6000 Frequency [MHz] Marker Freq[MHz] 2700 3300 3500 3800 4900 ■ S11[dB](1) -0.311 -0.386 -16.7 -20.6 -14.6 ■ S21[dB](1) -47.5 -0.559 -0.974-1.07 -62.6

8.0 mm