

USB350A - PRELIMINARY

3.3-3.8GHz USB Series TDD Bandpass Filter

Features

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

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade single-band TDD Pico-cell basestations for up to 5.0W at the antenna port.



Part Dimensions: 25.9 × 5.5 × 6.7 mm • 2.8 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 to other bandpass filter technologies.

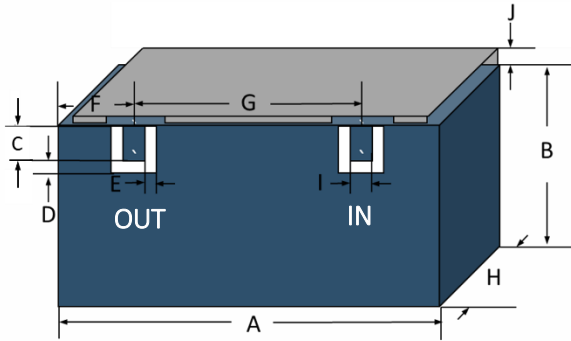
Electrical Specifications

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	-	-	-	8.0 Watt max
Peak Input Power	-	-	-	80 Watt max
Input-Output Response				
Passband Insertion Loss (5 MHz avg)	3300-3800	0.8 dB	1.0 dB max	1.0 dB max
Passband Ripple	3300-3800	0.3 dB	0.5 dB max	0.5 dB max
Passband Return Loss	3300-3800	17 dB	14 dB min	14 dB min
Attenuation:	1-2700	60 dB	55 dB min	55 dB min
	2701-3000	48 dB	43 dB min	43 dB min
	4200-6000	48 dB	43 dB min	43 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.

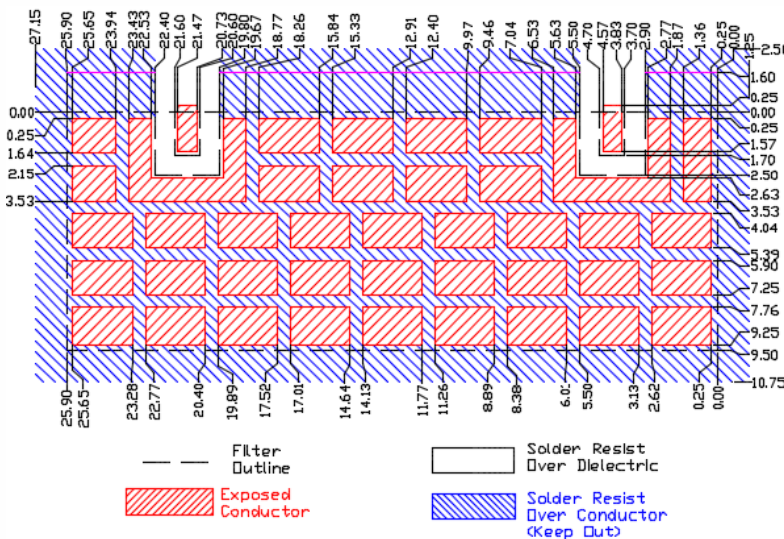
<u>Specification Allowance</u>	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	25.90	max
B	4.80	max
C	1.70	0.13
D	0.80	0.13
E	0.80	0.13
F	4.20	0.13
G	16.90	0.13
H	6.70	max
I	1.00	0.13
J	0.70	max

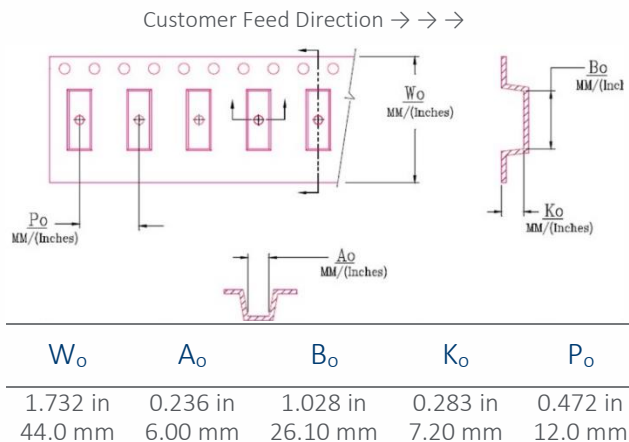
PCB Layout



NOTE: The 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 a smaller space can be allocated on the layout.

Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> CTS 350 YWW </div>
Reel Weight	kg	5.5	
Reel Quantity	ea.	500	



Electrical Response

