

USB362A - PRELIMINARY

Band 48 (3.55-3.7GHz) USB Series TDD BPF

Features

- Meets FCC CBRS emission requirements for 0.25W@Ant systems
- Low Loss with High Rejection
- Universal footprint across family for all TDD bands

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade TDD Pico-cells.



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	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max

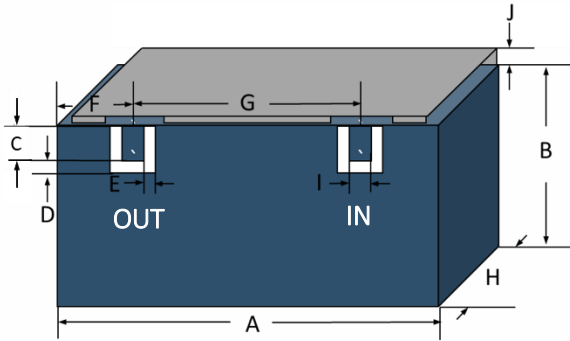
Input-Output Response

Passband Insertion Loss (20 MHz avg)	3550-3700	1.7 dB	1.8 dB max	1.8 dB max
Passband Insertion Loss (10 MHz avg)	3550-3700	1.9 dB	2.0 dB max	2.0 dB max
Passband Ripple (20 MHz avg)	3550-3700		1.0 dB max	1.0 dB max
Passband Return Loss	3550-3700	12 dB	10 dB min	10 dB min
Attenuation:	1-2690		50 dB min	50 dB min
	2690-3300		25 dB min	25 dB min
	3300-3530	7 dB	7 dB min	6 dB min
	3720-4200	7 dB	7 dB min	6 dB min
	4200-4900	35 dB	30 dB min	30 dB min
	4900-5850	42 dB	38 dB min	38 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.

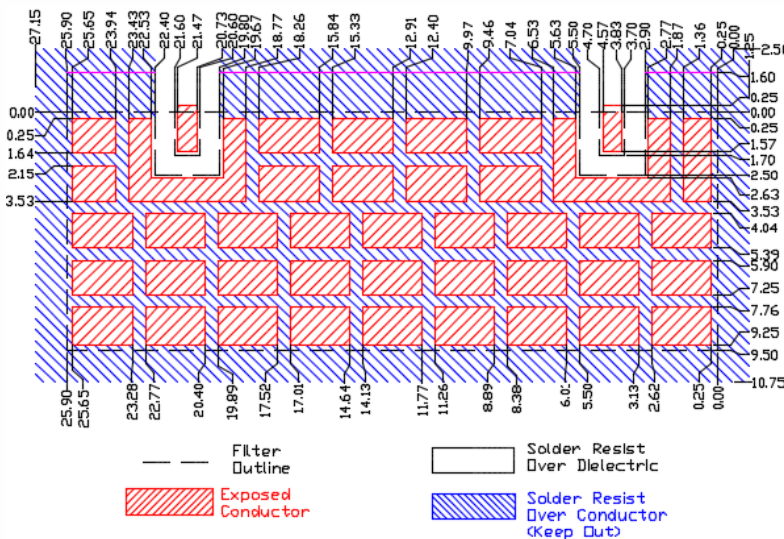
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

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

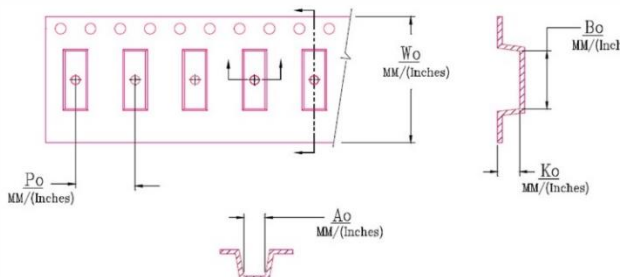


NOTE: The width of 9.50mm is necessary to support frequencies as low as 1885MHz for Band 39. If only higher frequency TDD bands are supported, then a smaller space can be allocated on the layout.

Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> CTS 362 YWW </div>
Reel Weight	kg	5.5	
Reel Quantity	ea.	500	

Customer Feed Direction → → →



W_0	A_0	B_0	K_0	P_0
1.732 in	0.236 in	1.028 in	0.283 in	0.472 in
44.0 mm	6.00 mm	26.10 mm	7.20 mm	12.0 mm

Electrical Response

