

USB039B - PRELIMINARY

Subset of B39 USB Series TDD BPF

Features

- 1885-1915Mhz subset of Band 39
- Low Loss with High Rejection and Low Ripple
- Support for 3GPP Receive Blocker specification
- 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 × 11.1 × 6.7 mm • 5.0 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. Provides 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

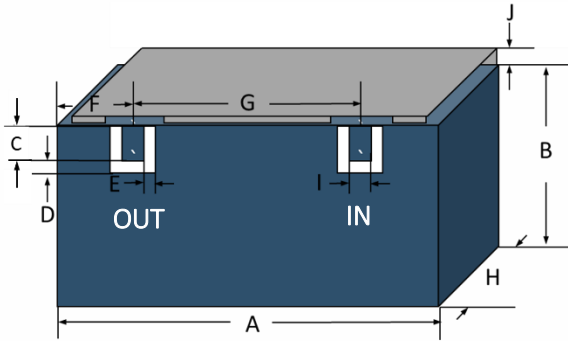
Input-Output Response

Passband Insertion Loss (5 MHz avg)	1885-1915	1.3 dB	1.5 dB max	1.7 dB max
Passband Ripple	1885-1915	0.6 dB	0.6 dB max	0.8 dB max
Passband Return Loss	1885-1915	15 dB	13 dB min	13 dB min
Attenuation:	1-1000			50 dB min
	1000-1785			35 dB min
	1785-1865			15 dB min
	1935-2000			15 dB min
	2000-2200			35 dB min
	2200-2690			50 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.

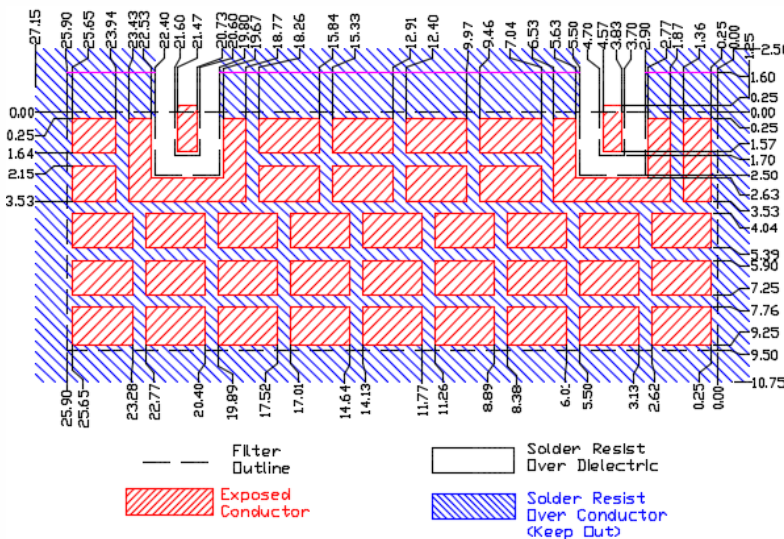
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	25.90	max
B	9.50	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	1.60	max

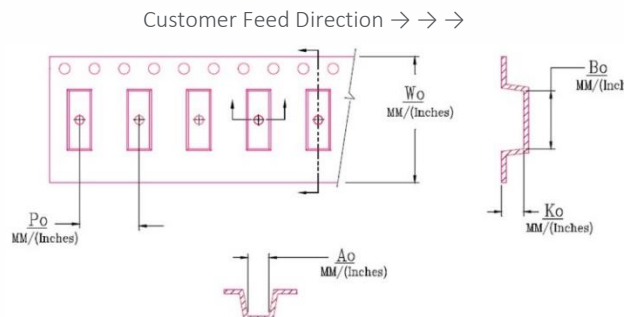
PCB Layout



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 39B YWW </div>
Reel Weight	kg	5.5	
Reel Quantity	ea.	500	



W_0	A_0	B_0	K_0	P_0
1.732 in	0.295 in	1.028 in	0.283 in	0.472 in
44.0 mm	7.50 mm	26.10 mm	7.20 mm	12.0 mm

Electrical Response

