

USB044A - PRELIMINARY

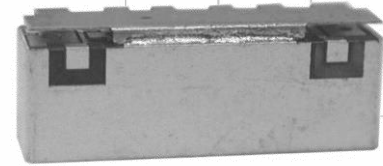
Band 44 USB Series TDD Bandpass Filter

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: **ESTIMATE 25.9 × 14.9 × 6.7 mm • 9.0? 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

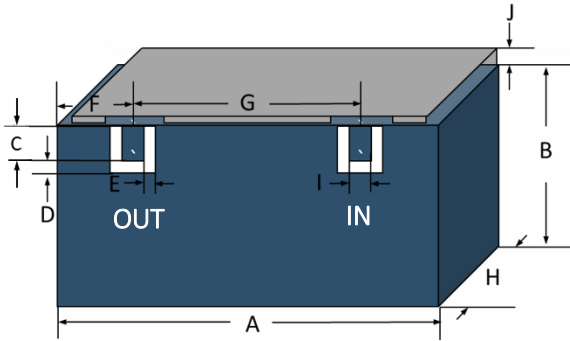
Input-Output Response

Passband Insertion Loss (20 MHz avg)	703-803	1.3 dB	1.5 dB max	1.7 dB max
Passband Insertion Loss (5 MHz avg)	703-803	1.8 dB	2.1 dB max	2.3 dB max
Passband Ripple (over 20 MHz)	703-803	2.0 dB	2.3 dB max	2.5 dB max
Passband Return Loss	703-803	13 dB	10 dB min	10 dB min
Attenuation:	1-683			20 dB min
	823-960			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.

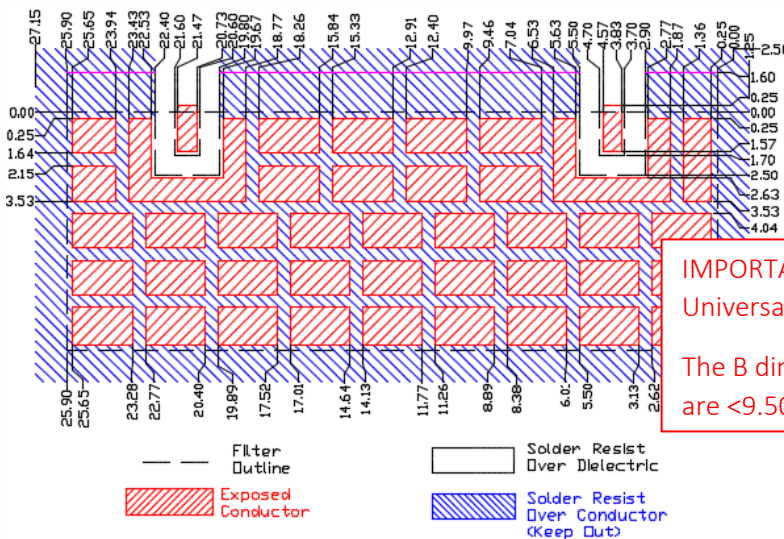
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	25.90	max
B	13.30	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

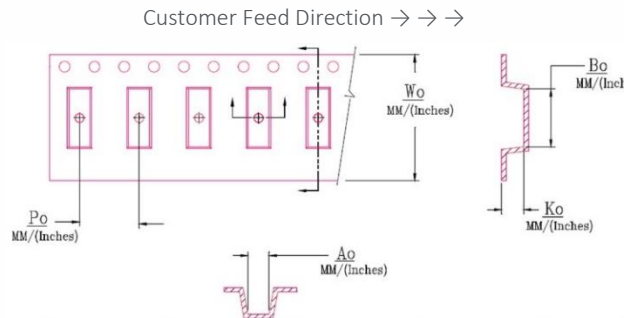


IMPORTANT: This part requires an EXCEPTION to the Universal Footprint.

The B dimension is 13.3mm whereas all other USB parts are <9.50mm.

Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> CTS 044 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

