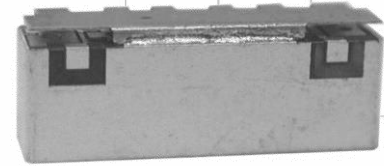


USB255A - PRELIMINARY

2535-2575 MHz USB Series TDD Bandpass Filter

Features

- Subset of Band 41 for China Unicom
- Low Loss with High Rejection
- Low ripple
- Universal footprint across family for all TDD bands



Applications

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

Part Dimensions: 25.9 × 8.9 × 6.7 mm • 3.7 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

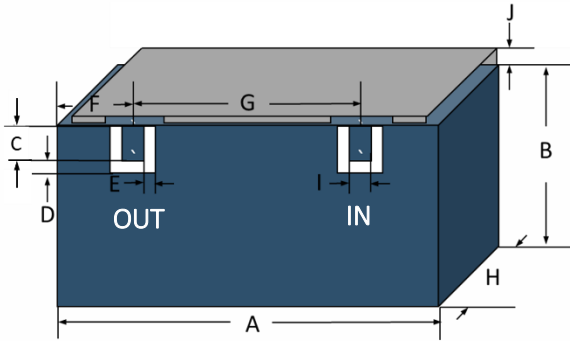
Input-Output Response

Passband Insertion Loss (40 MHz avg)	2535 - 2575	1.3 dB	1.5 dB max EST
Passband Insertion Loss (5 MHz avg)	2535 - 2555	1.7 dB	1.9 dB max EST
Passband Insertion Loss (5 MHz avg)	2555 - 2575	1.1 dB	1.3 dB max EST
Passband Ripple (full band)	2535 - 2575		<1.0 dB max EST
Passband Return Loss	2535 - 2575		14 dB min
Group Delay Variation	2535 - 2575		<20 ns
Attenuation:	1 - 1000		70 dB min
	1000 - 2025		57 dB min
	2025 - 2300		43 dB min
	2300 - 2483		50 dB min
	2483 - 2500		40 dB min
	2700 - 2900		40 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.

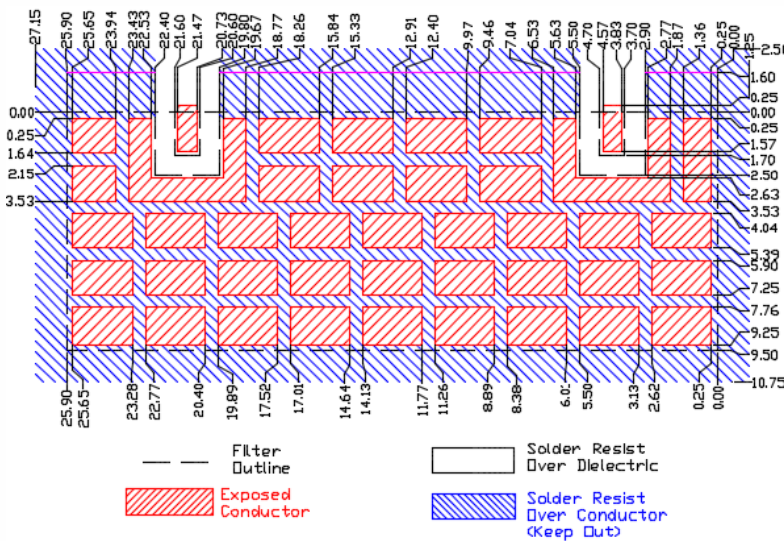
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	25.90	max
B	7.30	max
C	1.70	0.13
D	0.80	0.13
E	0.80	0.13
F	4.20	0.13
G	16.9	0.13
H	6.70	max
I	1.00	0.13
J	1.60	max

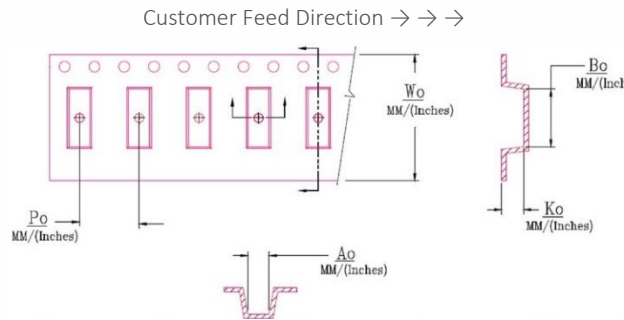
PCB Layout



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



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

Electrical Response

