



USB0781A - PRELIMINARY

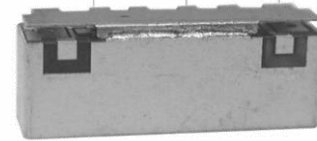
B28 DL 758-803MHz Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple
- Universal footprint across the full USB family of bandpass filters

Applications

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



Part Dimensions: 25.3 × 13.9 × 6.5 mm • 9.37 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	758-803	2.4 dB	2.6 dB max	2.8 dB max
Passband Ripple	758-803	1.5 dB	1.7 dB max	1.8 dB max
Passband Return Loss	758-803	14 dB	12 dB min	12 dB min
Attenuation:	1-702	43 dB	40 dB min	40 dB min
	703-748	28 dB	25 dB min	25 dB min
	823	28 dB	25 dB min	25 dB min
	880-TBD	43 dB	40 dB	40 dB

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.

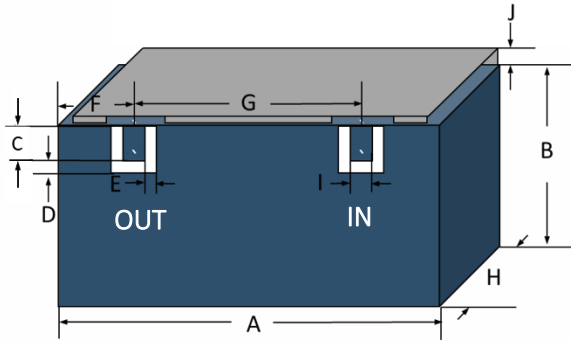
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



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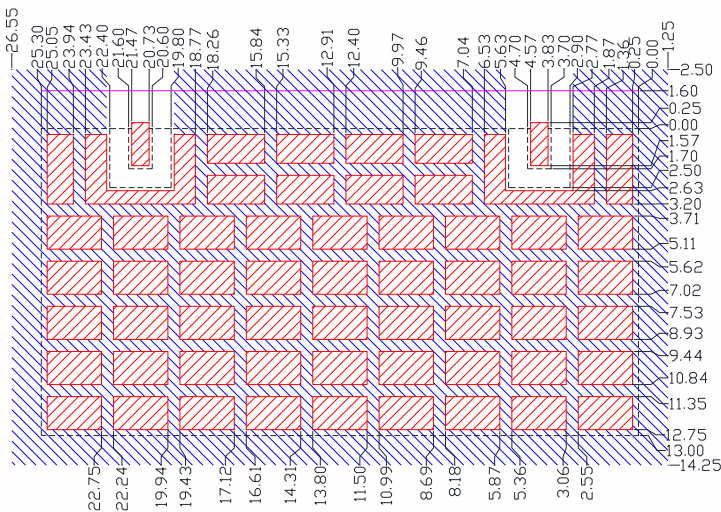
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Mechanical Drawing



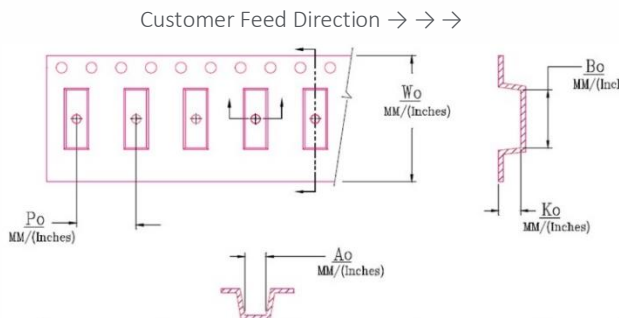
Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	25.00	0.30
B	12.70	0.30
C	1.70	0.13
D	0.80	0.13
E	0.80	0.13
F	4.05	0.13
G	16.90	0.13
H	6.30	0.20
I	1.00	0.13
J	1.10	0.20

PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	5.5	781
Reel Quantity	ea.	500	YWW



W_0	A_0	B_0	K_0	P_0
1.732 in 44.0 mm	0.559 in 14.2 mm	1.012 in 25.70 mm	0.268 in 6.80 mm	0.787 in 20.0 mm

Electrical Response

