

UPB384A - PRELIMINARY

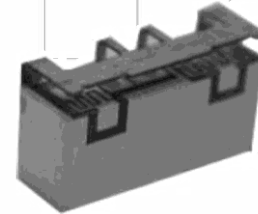
3700-3980MHz UPB Series TDD Bandpass Filter

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 0.25-0.5W at the antenna port.



Part Dimensions: 9.2 × 6.2 × 3.1 mm • < 1 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 other bandpass filter technologies.

Electrical Specifications

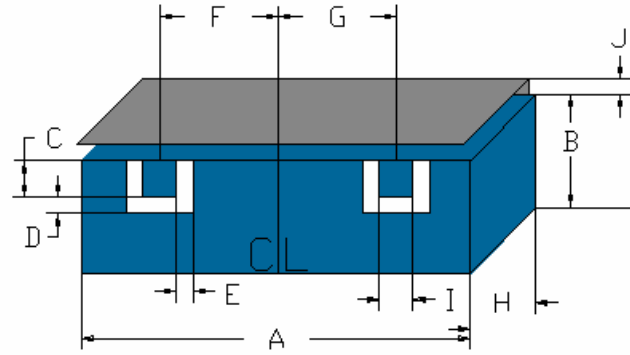
Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20 Watt max

Input-Output Response

Passband Insertion Loss (5 MHz avg)	3700-3980	1.9 dB	2.1 dB max	2.2 dB max
Passband Ripple	3700-3980	1.0 dB	1.2 dB max	1.4 dB max
Passband Return Loss	3700-3980	14 dB	12 dB min	12 dB min
Attenuation:	1-3400	41 dB	40 dB min	40 dB min
	3410-3640	13 dB	12 dB min	12 dB min
	4040-4399	13 dB	12 dB min	12 dB min
	4400-5950	40 dB	38 dB min	38 dB min
	5951-7125	30 dB	25 dB min	25 dB min
	7126-TBD	25 dB	20 dB min	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.

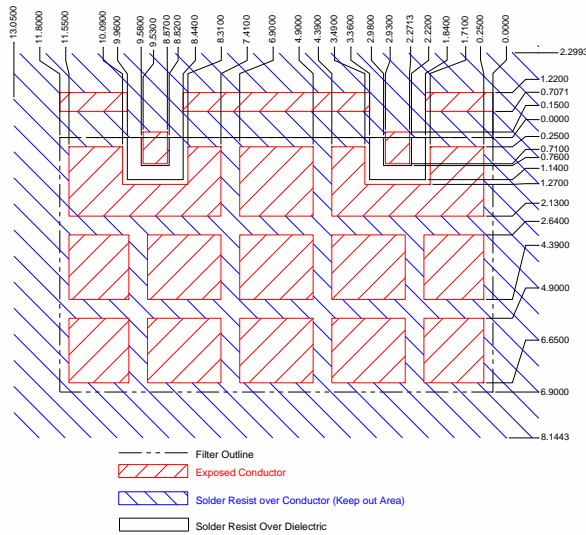
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.97	0.20
B	5.20	max
C	0.76	0.13
D	0.38	0.13
E	0.38	0.13
F	3.30	0.13
G	3.30	0.13
H	3.10	max
I	0.76	0.13
J	1.00	max

Mechanical Drawing

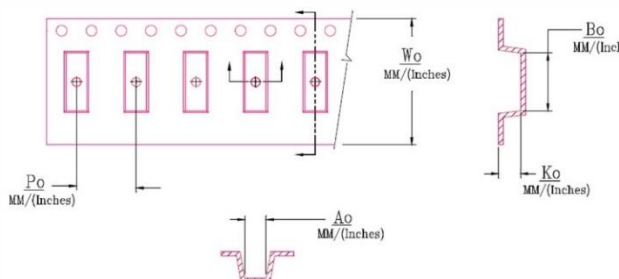
PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	5.5	384
Reel Quantity	ea.	500	YWW

Customer Feed Direction → →



W ₀	A ₀	B ₀	K ₀	P ₀
0.945 in	0.256 in	0.366 in	0.132 in	0.472 in
24.0 mm	6.5 mm	9.3 mm	3.35 mm	12.0 mm

Electrical Response

