

UPB400B - PRELIMINARY

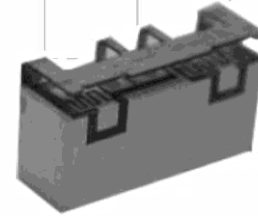
3800-4200MHz UPB Series TDD Bandpass Filter

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: 11.7 × 6.2 × 3.7 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

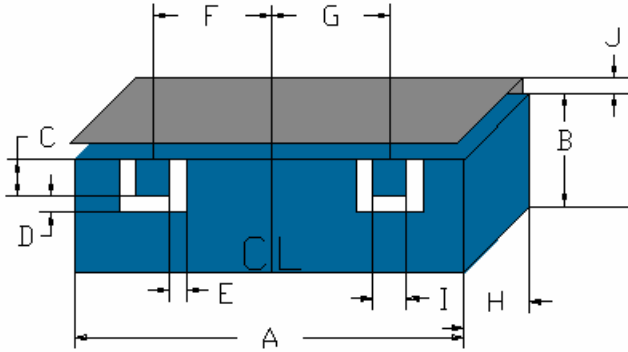
Input-Output Response

Passband Insertion Loss (5 MHz avg)	3800-4200	2.0 dB	2.2 dB max	2.4 dB max
Passband Ripple	3800-4200	1.0 dB	1.4 dB max	1.5 dB max
Passband Return Loss	3800-4200	14 dB	12 dB min	12 dB min
Attenuation:	1-2690	45 dB	40 dB min	40 dB min
	2691-3300	35 dB	30 dB min	30 dB min
	3301-3740	15 dB	13 dB min	13 dB min
	4260-4599	15 dB	13 dB min	13 dB min
	4600-4799	25 dB	30 dB min	30 dB min
	4800-TBD	45 dB	40 dB min	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.

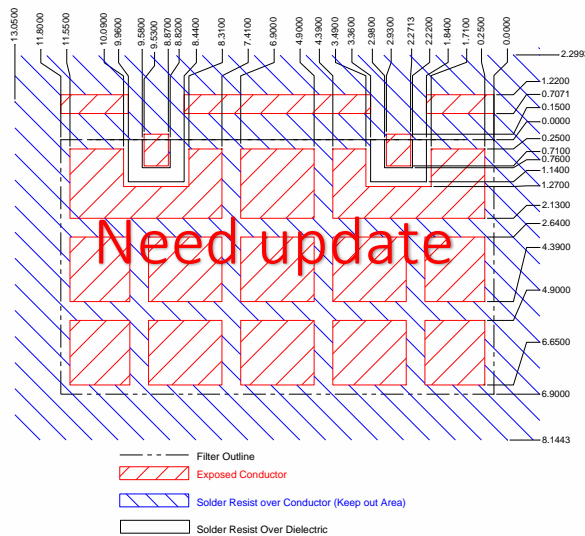
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	11.70	max
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	3.70	max
I	0.76	0.13
J	1.00	max

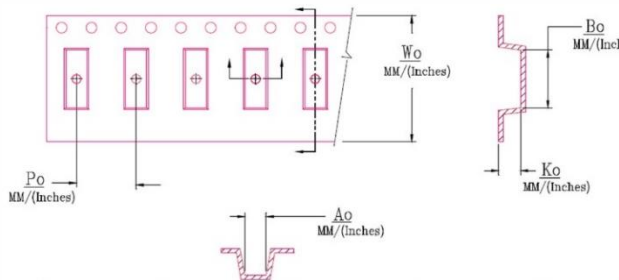
PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	5.5	400B
Reel Quantity	ea.	500	YWW

Customer Feed Direction → → →



W ₀	A ₀	B ₀	K ₀	P ₀
0.945 in 24.0 mm	0.256 in 6.5 mm	0.469 in 11.9 mm	0.146 in 3.7 mm	0.472 in 12.0 mm

Electrical Response

