

UPB042B 9mm - PRELIMINARY

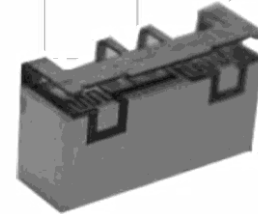
Band 42 UPB Series TDD Bandpass Filter

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 × 6.3 × 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)	3400-3600	2.0 dB	2.6 dB max	2.8 dB max
Passband Ripple	3400-3600	1.2 dB	2.1 dB max	2.2 dB max
Passband Return Loss	3400-3600	13 dB	12 dB min	12 dB min
Attenuation:	1-2690	40 dB	30 dB min	30 dB min
	2691-3100	35 dB	20 dB min	20 dB min
	3101-3380	7 dB	6 dB min	5 dB min
	3620-3800	7 dB	6 dB min	5 dB min
	3801-4400	30 dB	20 dB min	20 dB min
	4400-5500	38 dB	35 dB min	35dB 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.

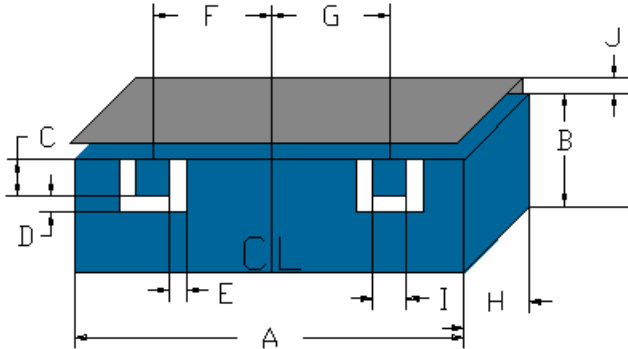
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



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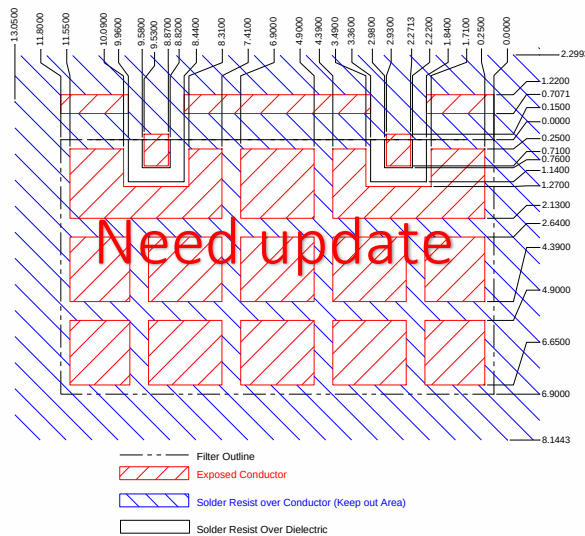
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Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.97	0.20
B	5.30	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

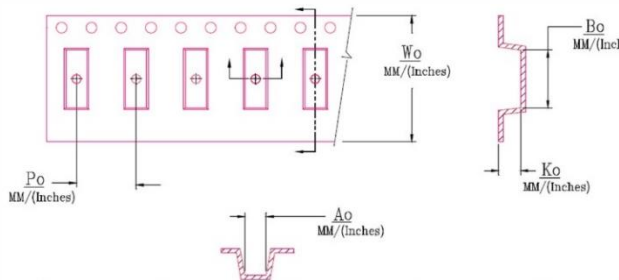
PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	CTS
Reel Weight	kg	5.5	43B
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	0.366 in 9.3 mm	0.132 in 3.35 mm	0.472 in 12.0 mm

Electrical Response

