

UPB042A - PRELIMINARY

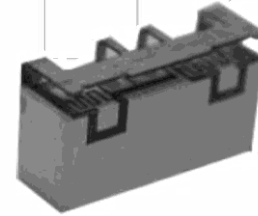
Band 42 UPB Series TDD Bandpass Filter

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: 10.2 × 6.2 × 4.0 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

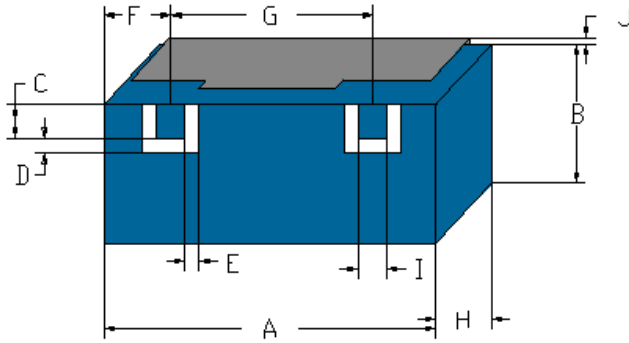
Input-Output Response

Passband Insertion Loss (5 MHz avg)	3400-3600	1.4 dB	1.5 dB max	1.6 dB max
Passband Ripple	3400-3600	0.8 dB	1.0 dB max	1.0 dB max
Passband Return Loss	3400-3600	14 dB	11 dB min	11 dB min
Attenuation:	1-2700	38 dB	35 dB min	35 dB min
	2701-3200	32 dB	28 dB min	28 dB min
	3800-4200	30 dB	26 dB min	26 dB min
	4200-4900	23 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.

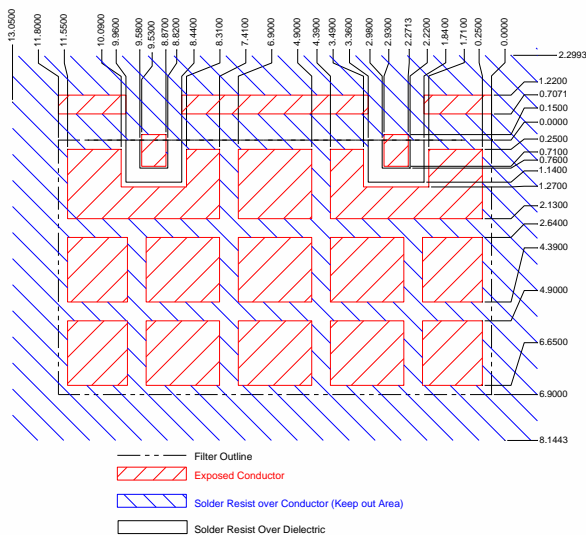
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	10.20	max
B	5.20	max
C	0.76	0.13
D	0.38	0.13
E	0.38	0.13
F	1.80	0.13
G	6.60	0.13
H	4.00	max
I	0.76	0.13
J	1.00	max

PCB Layout

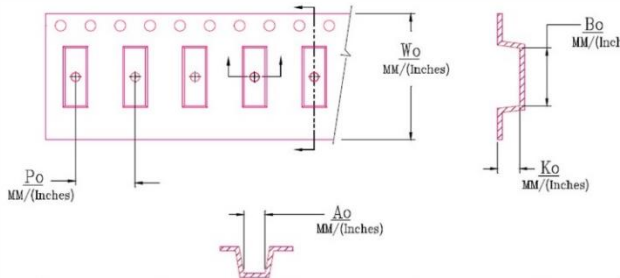


- Filter Outline
- Exposed Conductor
- Solder Resist over Conductor (Keep out Area)
- Solder Resist Over Dielectric

Packaging and Marking

Dimension	Units	Spec.	Product Marking
Reel Diameter	mm	330	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> CTS 042 YWW </div>
Reel Weight	kg	5.5	
Reel Quantity	ea.	500	

Customer Feed Direction → → →



W_0	A_0	B_0	K_0	P_0
0.945 in	0.319 in	0.406 in	0.165 in	0.472 in
24.0 mm	8.10 mm	10.30 mm	4.2 mm	12.0 mm

Electrical Response

