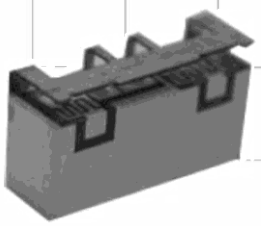
UPB041A - PRELIMINARY

Band 41 UPB Series TDD Bandpass Filter

Features

- Low Loss with High Rejection
- Low ripple
- Universal footprint across family for all TDD bands



Part Dimensions: 10.2 × 7.6 × 4.0 mm • 1.2 g
Materials: Ag plated ceramic block with tin plated brass shield

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade single-band TDD Pico-cell basestations for 0.25-0.5W at the antenna port.

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.

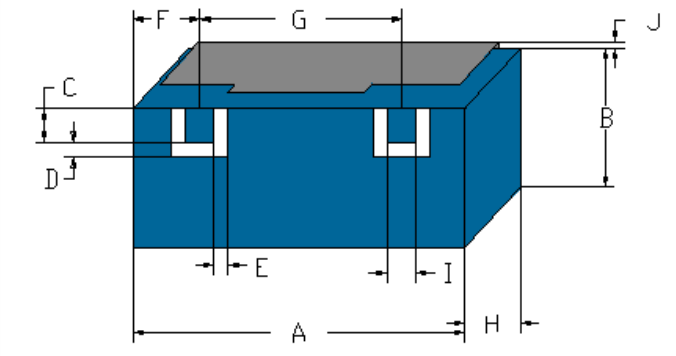
Electrical Specifications

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	2496-2690	1.2 dB	1.7 dB max	2.0 dB max
Passband Ripple	2496-2690	0.2 dB	1.0 dB max	1.0 dB max
Passband Return Loss	2496-2690	13 dB	10 dB min	10 dB min
Attenuation:	0.1-2300	42 dB	40 dB min	40 dB min
	2900-4000	42 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.

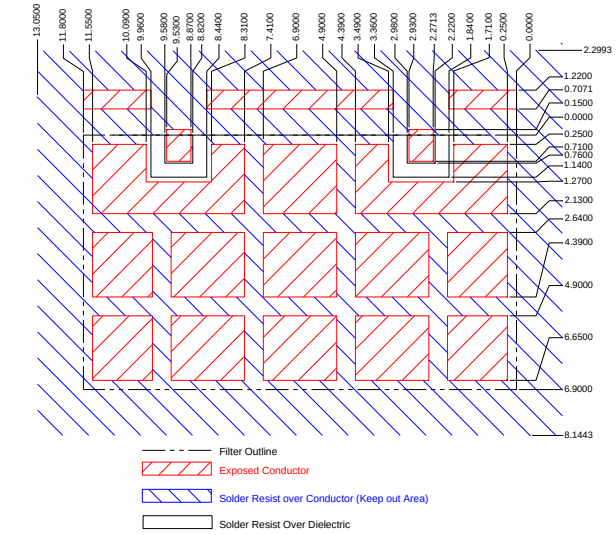
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	10.20	max
B	6.60	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



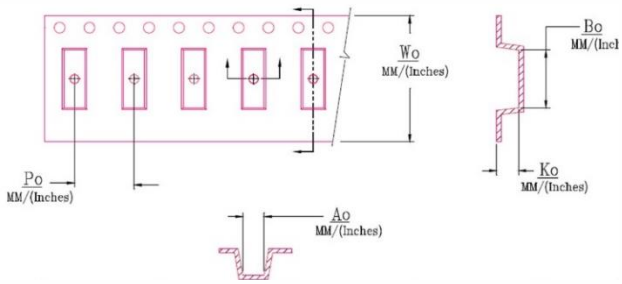
Packaging and Marking

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	5.5
Reel Quantity	ea.	500

Product Marking

CTS
041
YWW

Customer Feed Direction → → →



W_o	A_o	B_o	K_o	P_o
0.945 in 24.0 mm	0.319 in 8.10 mm	0.406 in 10.30 mm	0.165 in 4.2 mm	0.472 in 12.0 mm

Electrical Response