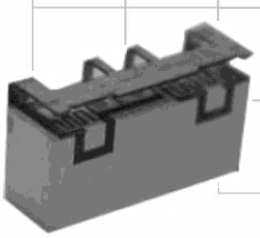
UPB485A

4.8-4.9 GHz UPB Series Bandpass Filter

Features

- Companion to UPB360A
- Low Loss and low ripple with High Rejection
- Universal footprint across family for all TDD bands



Part Dimensions: 9.2 × 4.9 × 3.2 mm • 0.36 g
Materials: Ag plated ceramic block with tin plated brass shield

Applications

- Wireless Infrastructure applications

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.

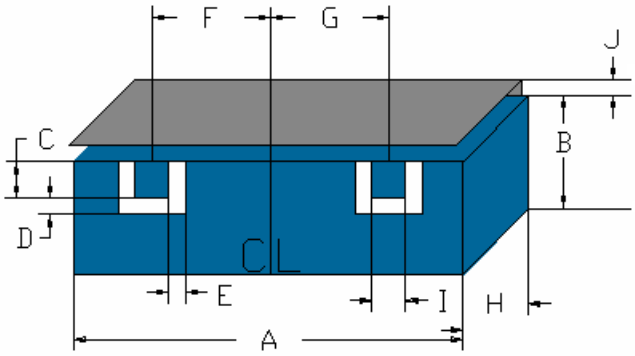
Electrical Specifications

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 (single point)	4800-4900	1.3 dB	1.6 dB max	1.7 dB max
Passband Insertion Loss (100MHz avg)	4800-4900	1.2 dB	1.5 dB max	1.6 dB max
Passband Ripple	4800-4900	0.3 dB	0.7 dB	0.8 dB max
Passband Return Loss	4800-4900	15 dB	14 dB	14 dB min
Attenuation:	1-2500	50 dB	40 dB	40 dB min
	2500-4000	30 dB	25 dB	25 dB min
	5150-5900	32 dB	30 dB	30 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.

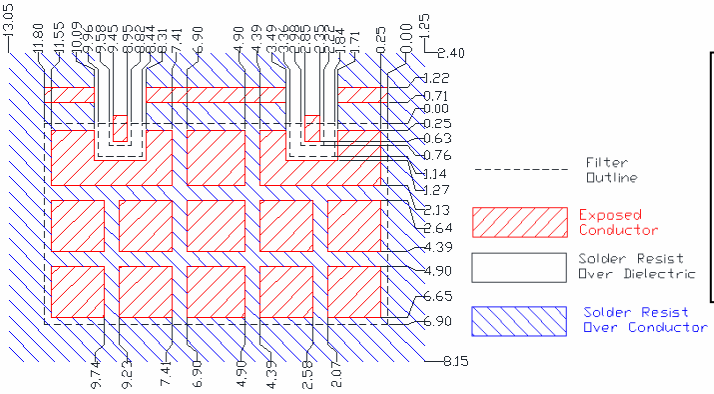
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.97	0.20
B	3.70	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	3.20	max
I	0.76	0.13
J	1.00	0.20

PCB Layout



IMPORTANT: Please assure >=30mils (0.75mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the required ground plane.

Please assure sufficient ground vias between the top metal ground plane and the primary ground plane.

Recommended solder: 4-6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.

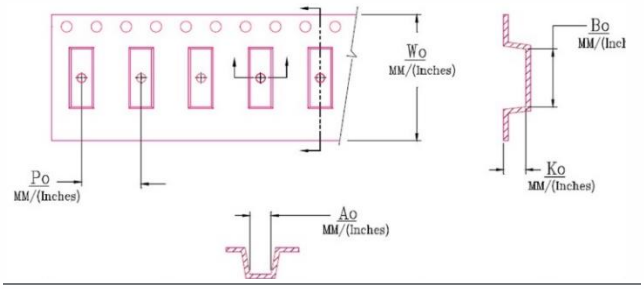
Packaging and Marking

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

Product Marking

CTS
485
YWW

Customer Feed Direction → → →



W_o	A_o	B_o	K_o	P_o
0.630 in 16.0 mm	0.205 in 5.20 mm	0.366 in 9.30 mm	0.132 in 3.35 mm	0.472 in 12.0 mm

Electrical Response