





# **UPB480B 9mm - PRELIMINARY**

4700-4900MHz 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.



### 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)	4700-4900	2.7 dB	2.8 dB max	3.0 dB max
Passband Ripple	3550-3700	2.0 dB	2.2 dB max	2.3 dB max
Passband Return Loss	3550-3700	13 dB	12 dB min	12 dB min
Attenuation:	1-2690	35 dB	30 dB min	30 dB min
	2691-4200	21 dB	20 dB min	20 dB min
	4201-4680	6.5 dB	6 dB min	5 dB min
	4920-5149	6.5 dB	6 dB min	5 dB min
	5150-5549	21 dB	20 dB min	20 dB min
	5550-6000	38 dB	35 dB min	35 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

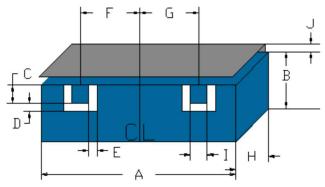
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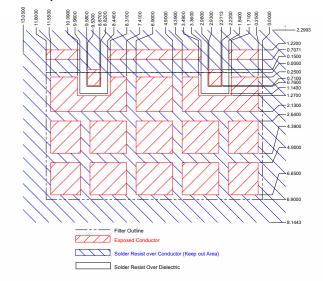
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# **Mechanical Drawing**

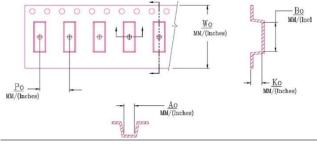


## **PCB Layout**



# Packaging and Marking

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Dimension		Units	Spec.	Product Marking	
Ξ	Reel Diameter	mm	330	CTS	
	Reel Weight	kg	5.5	80B	
	Reel Quantity	ea.	500	Y VV VV	
	Cust	omer Fee	d Direction	$1\rightarrow\rightarrow\rightarrow$	
	00000	0000	0 0	<u>Bo</u>	



$W_o$	$A_{o}$	Bo	Ko	Po
0.945 in	0.189 in	0.366 in	0.126 in	0.315 in
24.0 mm	4.8 mm	9.3 mm	3.2 mm	8.0 mm

#### Nominal Tolerance Dim. (±mm or Max) (mm) 8.97 0.20 В 3.60 max С 0.76 0.13 D 0.38 0.13 Ε 0.38 0.13 F 3.30 0.13 G 3.30 0.13 Н 3.10 max 0.76 0.13 1.00 max

# **Electrical Response**

