

MMB350A - PRELIMINARY 3.3-3.8GHz MMB Series TDD Bandpass Filter

Features

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

Applications

- Wireless Infrastructure applications
- Massive MIMO and Active Antenna Systems
- High-performance carrier-grade TDD systems

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 to other bandpass filter technologies.

Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25℃	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	10.0 Watt max
Peak Input Power	-	-	-	100 Watt max

Passband Insertion Loss (100 MHz avg)	3300-3800	1.4-1.5 dB max
Passband Insertion Loss (20 MHz avg)	3300-3800	1.4-1.5 dB max
Passband Ripple	3300-3800	1.1-1.2 dB max
Passband Return Loss	3300-3800	12 dB min
Attenuation:	1-3100	50 dB min
	3101-3240	27-30 dB min
	3241-3260	15-18 dB min
	3840-3859	15-18 dB min
	3860-4099	27-30 dB min
	4100-4999	50 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



Part Dimensions: ESTIMATE 40 × 8 × 9.3 mm • <10 g Materials: Ag plated ceramic block with tin plated brass shield



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2.50-

0.00

2.48

2.99

5.37 5.88 8.25

9.75

PCB Layout

Mechanical Drawing

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PRELIMINARY - MMB350A

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Nominal (mm)	Tolerance (±mm or Max)		
40.0	max		
4.8 <mark>?</mark>	max		
1.0	0.13		
0.5	0.13		
0.5	0.13		
4.5	0.25		
31.0	0.13		
9.3	max		
1.0	0.13		
1.4	0.2		
	(mm) 40.0 4.8? 1.0 0.5 0.5 4.5 31.0 9.3 1.0		

NOTE: The width of 8.50mm is necessary to support frequencies as low as 1885MHz for Band 39. If only higher frequency TDD bands are supported, then a smaller space can be allocated on the layout.



Packaging and Marking

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-41.25

0.25

0.87

1.00 1.50 1.63

34.37 34.37 34.50 355.00 355.00 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 36.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.50 37.5

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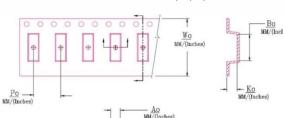
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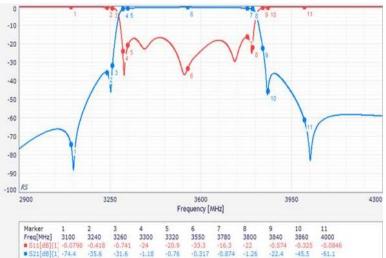
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Dimension	Units	Spec.	Product Marking		rking
Reel Diameter	mm	330		CTS	
Reel Weight	kg			350	
Reel Quantity	ea.	250		YWW	



2.205 in 0.2	56 in 1.5	87 in 0.3	78 in 0.630	in
56.0 mm 6.5	5 mm 40.	3 mm 9.6	mm 16.0 m	m

Electrical Response



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