MMB550A - PRELIMINARY

5.15-5.85GHz MMB Series TDD BPF

Features

- Appropriate for 5GHz WiFi, LTE-U LAA, etc.
- Low Loss with High Rejection
- Universal footprint across family for all TDD bands

Part Dimensions: 40.1 × 4.3 × 9.2 mm • 3.8 g
Materials: Ag plated ceramic block with tin plated brass shield

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade TDD Pico-cells.

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°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	8.0 Watt max
Peak Input Power	-	-	-	80 Watt max
Input-Output Response				
Passband Insertion Loss (20 MHz avg)	5150-5850			1.0 dB max
Passband Return Loss	5150-5850			12 dB min
Attenuation:	1-4700			55 dB min
	4700-4900			30 dB min
	6300-7200			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

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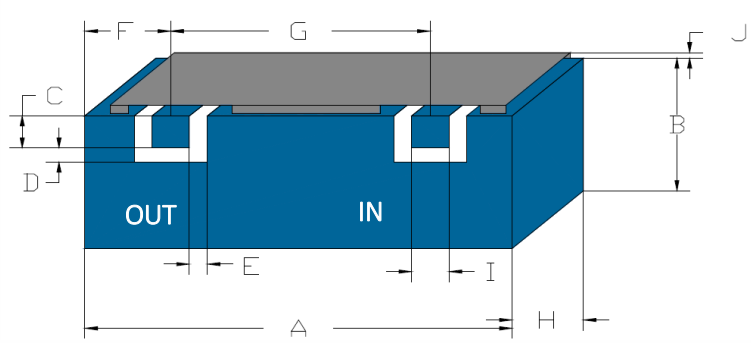
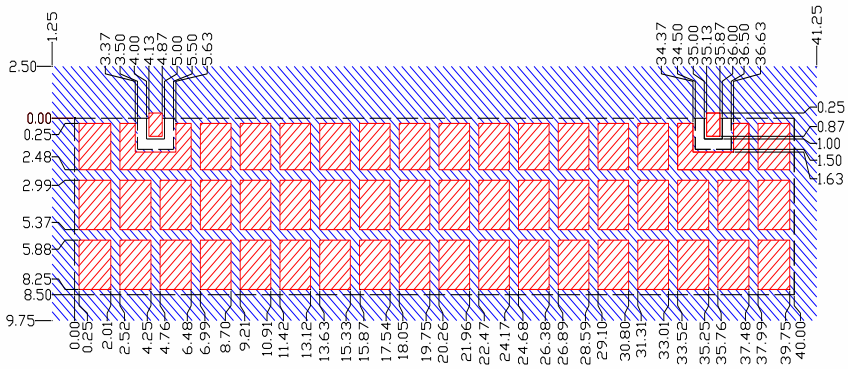
Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	39.8	0.30
B	2.4	0.20
C	1.0	0.13
D	0.5	0.13
E	0.5	0.13
F	4.4	0.25
G	31.0	0.13
H	9.0	0.20
I	1.0	0.13
J	1.5	0.20

PCB Layout



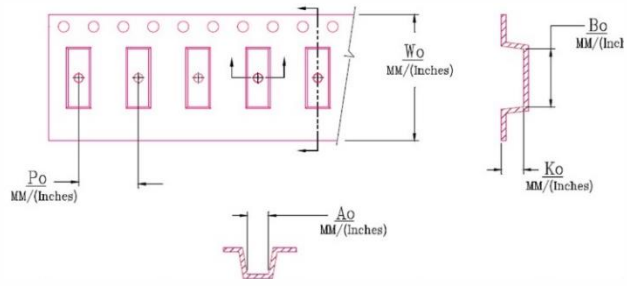
Combined 40mm & 50mm universal footprint PCB layout is also available.

Packaging and Marking

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

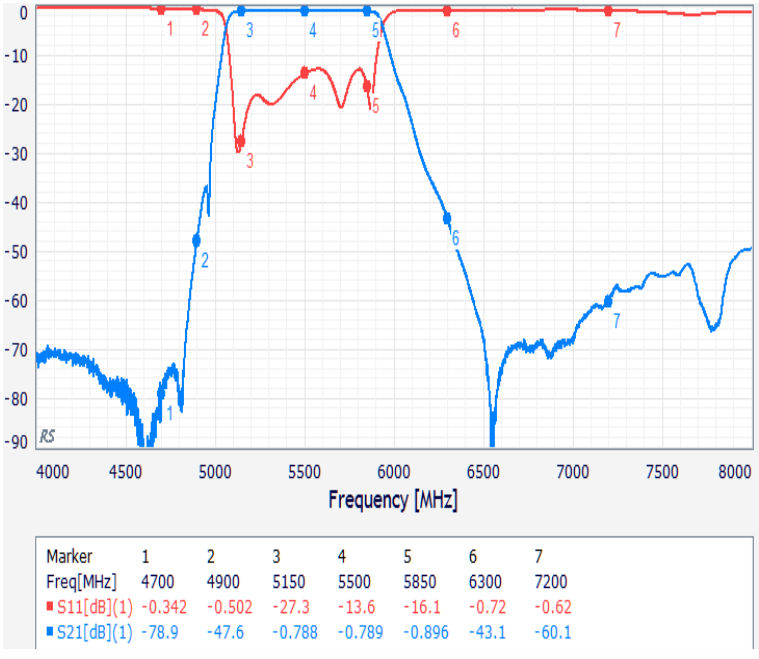
Product Marking

CTS
550
YWW



W_o	A_o	B_o	K_o	P_o
2.205 in 56.0 mm	0.256 in 6.5 mm	1.587 in 40.3 mm	0.378 in 9.6 mm	0.630 in 16.0 mm

Electrical Response



Marker	1	2	3	4	5	6	7
Freq[MHz]	4700	4900	5150	5500	5850	6300	7200
S11[dB](1)	-0.342	-0.502	-27.3	-13.6	-16.1	-0.72	-0.62
S21[dB](1)	-78.9	-47.6	-0.788	-0.789	-0.896	-43.1	-60.1