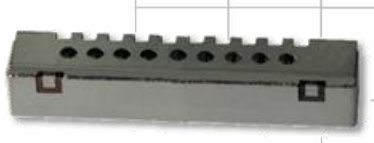
Product Brief

UMB179A - PRELIMINARY

1785-1805 MHz Bandpass Filter



Part Dimensions: 56.8 × 11.6 × 14.7 mm • 28.3 g
Materials: Ag plated ceramic block with tin plated brass shield

Features

- Low loss with high rejection
- Support I/O spacing to allow expanded-length universal footprint with UMB family TDD bands

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade TDD Pico-cells
- Wide-band DAS, Repeaters, massive MIMO systems, or small-cells basestations

Description

Surface mount ceramic bandpass filter for TDD frequency band designed to share an extended PCB footprint with the MMB family. Superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other bandpass filter technologies.

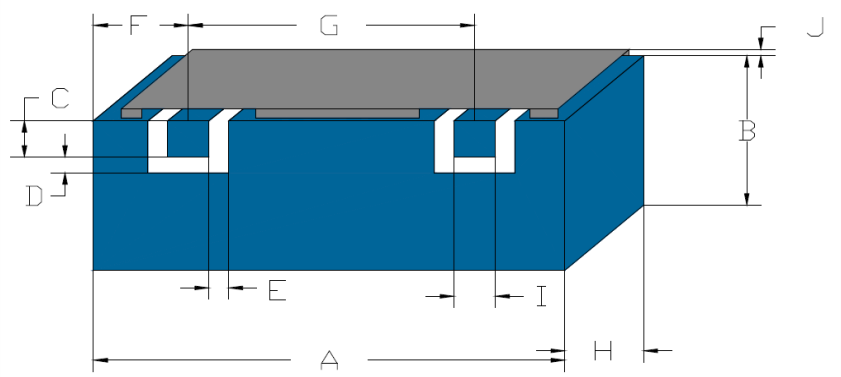
Electrical Specifications

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	-	-	-	20 Watt max
Peak Input Power	-	-	-	160 Watt max
Input-Output Response				
Passband Insertion Loss (5MHz Average)	1785 - 1805	1.8 dB	2.0 dB max	2.2 dB max
Passband Ripple	1785 - 1805	0.3 dB	0.7 dB max	0.8 dB max
Passband Return Loss	1785 - 1805	16 dB	15 dB min	15 dB min
Attenuation:	1 - 1740	50 dB	47 dB min	47 dB min
	1740 - 1765	40 dB	35 dB min	35 dB min
	1825 - 1855	47 dB	45 dB min	45 dB min
	1855 - 1915	65 dB	60 dB min	60 dB min
	1915 - 1925	65 dB	60 dB min	60 dB min
	2500 – 3000	TBD	TBD	TBD

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.

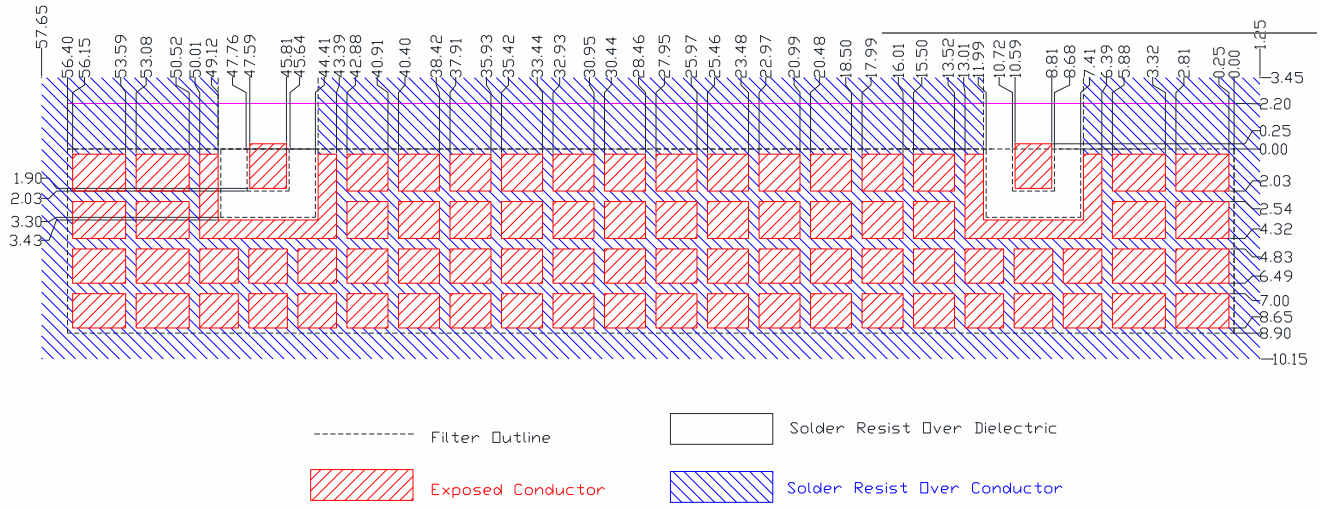
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

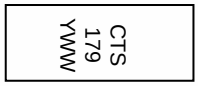


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	56.4	0.40
B	8.90	0.30
C	2.03	0.13
D	1.27	0.13
E	1.27	0.13
F	9.70	0.25
G	37.0	0.13
H	14.5	0.20
I	2.03	0.13
J	2.20	0.2

PCB Layout



Packaging and Marking



Packaging TBD

Electrical Response