Product Brief

UMB103A - PRELIMINARY

1027-1033 MHz Bandpass Filter

Features

- Low loss with high rejection
- Support universal footprint with UMB family

Applications

- Specialty Wireless Infrastructure applications

Part Dimensions: 56.4 × 13.4 × 14.7 mm • TBD g
Materials: Ag plated ceramic block with fused-tin plated brass shield

Description

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

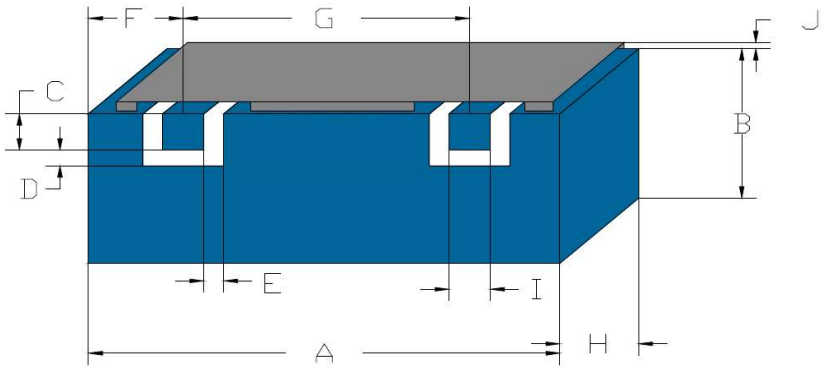
Electrical Specifications

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	-	-	-	10 Watt max
Peak Input Power	-	-	-	100 Watt max
Input-Output Response				
Passband Insertion Loss (single point)	1027 - 1033	1.3 dB	1.5 dB max	1.6 dB max
Passband Ripple	1027 - 1033	0.2 dB	0.4 dB max	0.5 dB max
Passband Return Loss	1027 - 1033	16 dB	14 dB min	14 dB min
Attenuation:	1 - 990	42 dB	40 dB min	40 dB min
	1005	29 dB	27 dB min	27 dB min
	1057	29 dB	27 dB min	27 dB min
	1070 - 1600?	42 dB	40 dB min	40 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.

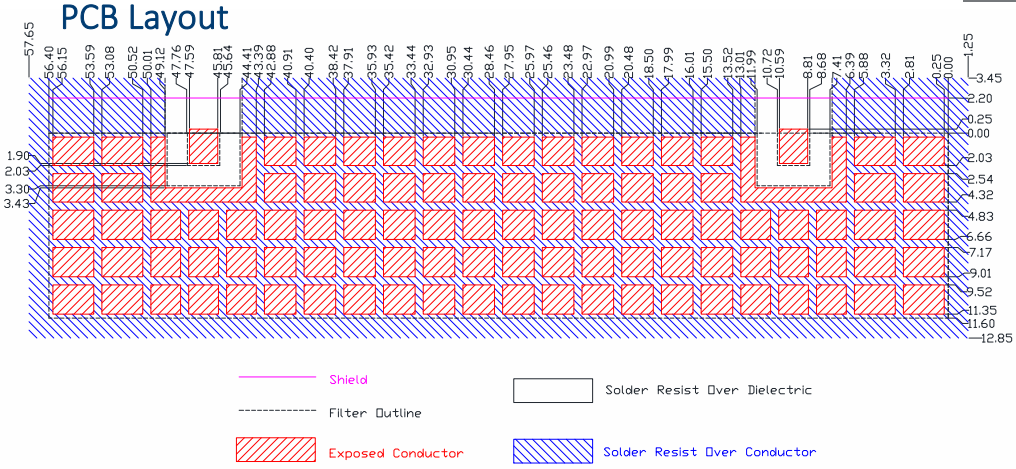
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

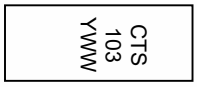


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	55.9	0.50
B	10.6	0.40
C	2.03	0.13
D	1.27	0.13
E	1.27	0.13
F	n/a	
G	37.0	0.13
H	14.5	0.20
I	2.03	0.13
J	2.20	0.2

PCB Layout



Packaging and Marking



Electrical Response