

UMB109A - PRELIMINARY 1087-1093 MHz Bandpass Filter

Features

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

Applications

- Specialty Wireless Infrastructure applications

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)	1087 - 1093	1.3 dB	1.5 dB max	1.6 dB max
Passband Ripple	1087 - 1093	0.2 dB	0.4 dB max	0.5 dB max
Passband Return Loss	1087 - 1093	16 dB	14 dB min	14 dB min
Attenuation:	1 - 1050	42 dB	40 dB min	40 dB min
	1065	29 dB	27 dB min	25 dB min
	1117	29 dB	27 dB min	25 dB min
	1130 - 1600?	42 dB	40 dB min	40 dB min

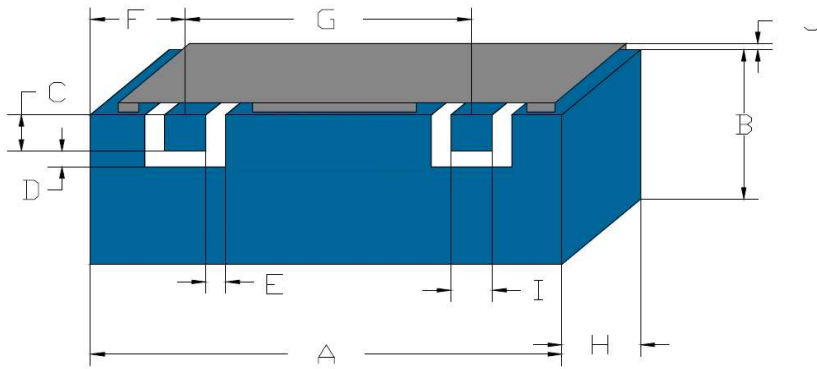
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

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



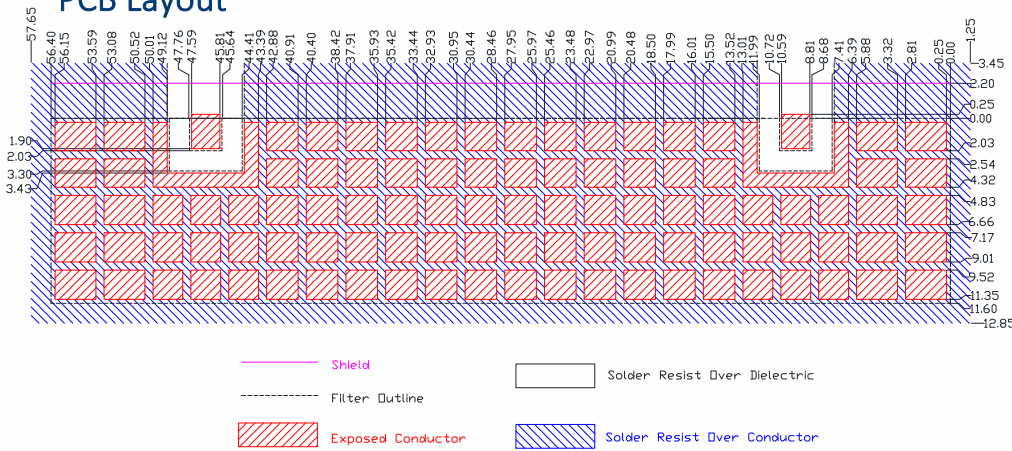
Part Dimensions: 56.4 × 12.7 × 14.7 mm • TBD g
Materials: Ag plated ceramic block with fused-tin plated brass shield

Mechanical Drawing

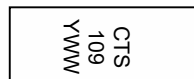


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	55.9	0.50
B	9.9	0.40
C	2.03	0.13
D	1.27	0.13
E	1.27	0.13
F	n/a	
G	37.0	0.13
H	14.5	0.20
I	2.03	0.13
J	2.20	0.2

PCB Layout



Packaging and Marking



Electrical Response

