XSB180A - PRELIMINARY

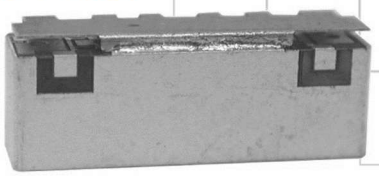
1750-1850MHz XSB Series TDD Bandpass Filter

Features

- Low Loss with High Rejection and Low Ripple

Applications

- High-performance rugged wireless infrastructure.



Part Dimensions: 26.6 x 7.2 x 8.6 mm est. • 6 g est.
Materials: Ag plated ceramic block with tin plated brass shield

Description

Surface mount ceramic bandpass filter with 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	-	-	-	40 Watt max TBC
Peak Input Power	-	-	-	50 Watt max
Input-Output Response				
Passband Insertion Loss (single-point)	1750-1850	0.8 dB		< 1.0-1.25 dB max
Passband Return Loss	1750-1850	14 dB		11 dB min est
Attenuation:	1-1525			>35 dB min
	2100-2225			>35 dB min
	2226-9250			Not supported without LPF

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

TBC = "*To be confirmed*"

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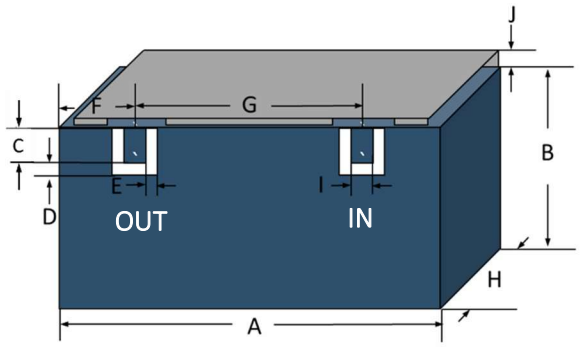
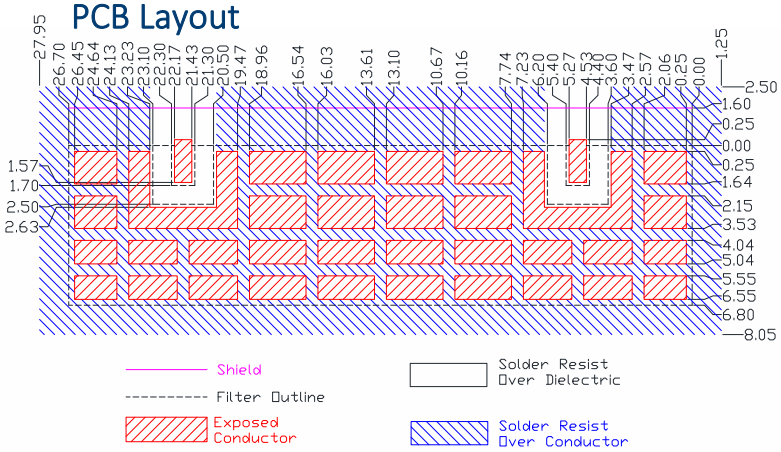
Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	26.30	0.30
B	5.1	0.30
C	1.70	0.13
D	0.80	0.13
E	0.80	0.13
F	n/a	
G	16.90	0.13
H	8.60	max
I	1.00	0.13
J	1.60	0.20

PCB Layout



IMPORTANT: Please assure >=20mils (0.5mm) thickness of dielectric beneath the I/O Pads and the surrounding clearance zone down to the ground plane.

Please assure sufficient ground vias between the top metal ground plane and the primary ground plane.

Recommended solder: 4-6 mils of SAC305 with reflow including 120s of soak at 217°C, and up to 30 sec peak at 241°C.

NOTE: The width of 9.50mm 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..

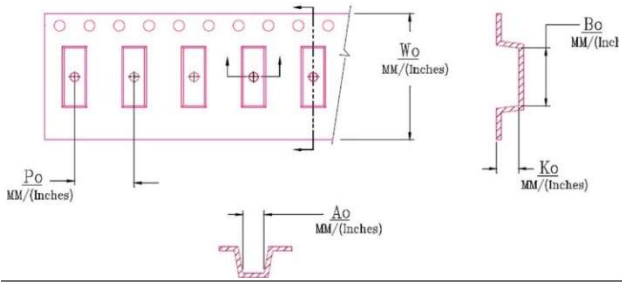
Packaging and Marking

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	5.5
Reel Quantity	ea.	500

Product Marking

TRI
180
YWW

Customer Feed Direction → → →



W_o	A_o	B_o	K_o	P_o
1.732 in	0.295 in	1.059 in	0.350 in	0.472 in
44.0 mm	7.5 mm	26.9 mm	8.9 mm	12.0 mm

Electrical Response