

MCB0260B - Preliminary

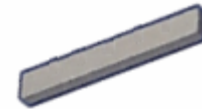
38.4 - 40.0 GHz mmWave ClearPlex Bandpass Filter

Features

- High-Q Low-Loss with High Rejection
- Narrowband subset of N260 band

Applications

- mmWave carrier-grade Infrastructure applications



Part Dimensions: EST 8.6 × 1.7 × 0.9 mm • <1.0 g

Description

Surface mount bandpass filter with I/Os that can interface to micro-strip transmission lines on the top-layer of customer PCBs. Superior rejection, insertion loss, reliability, temperature stability as well as both peak and average power handling compared to other mmWave bandpass filter technologies.

Electrical Specifications

Parameter	Frequency (GHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	5.0 Watt max
Peak Input Power	-	-	-	50 Watt max
Input-Output Response				
Passband Insertion Loss (400 MHz avg)	38.40 - 40.00			2.2 dB Goal 3.0 dB Max
Passband Ripple	38.40 - 40.00			0.9 dB Goal 1.4 dB Max
Passband Return Loss	38.40 - 40.00			14 dB Goal 12 dB Min
Attenuation:	< 36.00			50 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.

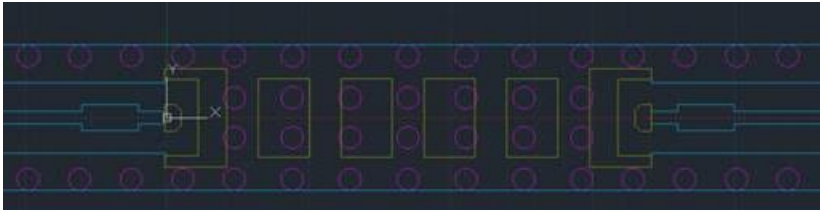
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.50	0.10
B	1.50	0.20
C		
D		
E		
F		
G		
H	0.80	0.10
I		
J		

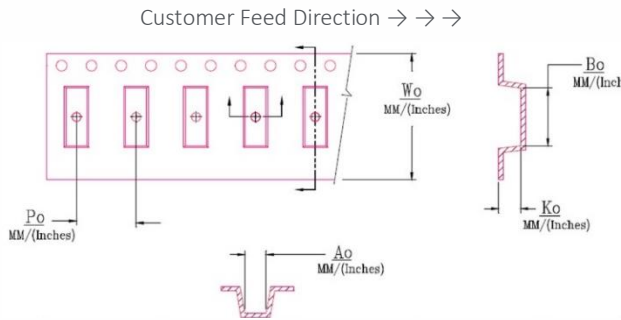
Dimensions are NOT final.

PCB Layout



Packaging and Marking

Dimension	Units	Spec.	Product Marking (TBD on the filters)
Reel Diameter	mm	330	
Reel Weight	kg	x.x	
Reel Quantity	ea.	Xxx	



W_0	A_0	B_0	K_0	P_0
0.945 in 24.0 mm	0.070 in 1.78 mm	0.350 in 8.9 mm	0.051 in 1.3 mm	0.315 in 8.0 mm

Electrical Response

