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Eaglewood Park, ILMINSTER
Somerset, TA19 9DQ, UK

SAW Filter 456MHz — Model: TB0462A
Part No: MP02643 — Rev No: 1

A. MAXIMUM RATING:

1. Operating Temperature: -20℃ ~ +60℃
2. Storage Temperature: -40℃ ~ +85℃
3. Input Power Level: 10dBm

B. CHARACTERISTICS:

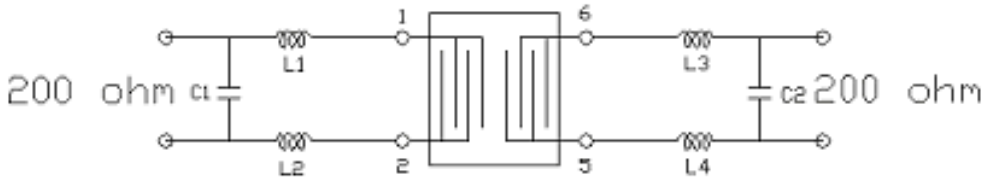
1. Ambient Temperature: 25℃
2. Optimal Source Impedance (Balanced): 200Ω
3. Optimal Load Impedance (Balanced): 200Ω

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center Frequency Fc MHz	-	456	-	-
Minimum Insertion Loss (453.8 ~ 458.2MHz) dB		12.0	13.0	
Passband Ripple (453.8 ~ 458.2MHz) dB	-	0.50	1.00	-
30dB Bandwidth MHz		10.6	11.5	
Attenuation: (Reference level from minimum insertion loss) dB				
10MHz ~ 256MHz dB	30	70	-	-
256MHz ~ 360MHz dB	40	64	-	-
360MHz ~ 421MHz dB	40	55	-	-
421MHz ~ 449MHz dB	36	44	-	-
463MHz ~ 491MHz dB	36	44	-	-
491MHz ~ 552MHz dB	40	55	-	-
552MHz ~ 656MHz dB	40	66	-	-
656MHz ~ 946MHz dB	30	59	-	-
Absolute Group Delay at Fc uS	-	0.45	0.55	-
Group Delay Ripple (453.8 ~ 458.2MHz) dB	-	52	100	-
Input Return Loss (453.8 ~ 458.2MHz) dB	10	36	-	-
Output Return Loss (453.8 ~ 458.2MHz) dB	10	18	-	-
Temp Coefficient ppm/℃ ^{2}	-0.036			

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C. MEASUREMENT CIRCUIT:



L1 = L2 = 18nH C1 = 12pF L3 = L4 = 18nH C2 = 10pF

D. FREQUENCY CHARACTERISTICS:

S21 Response

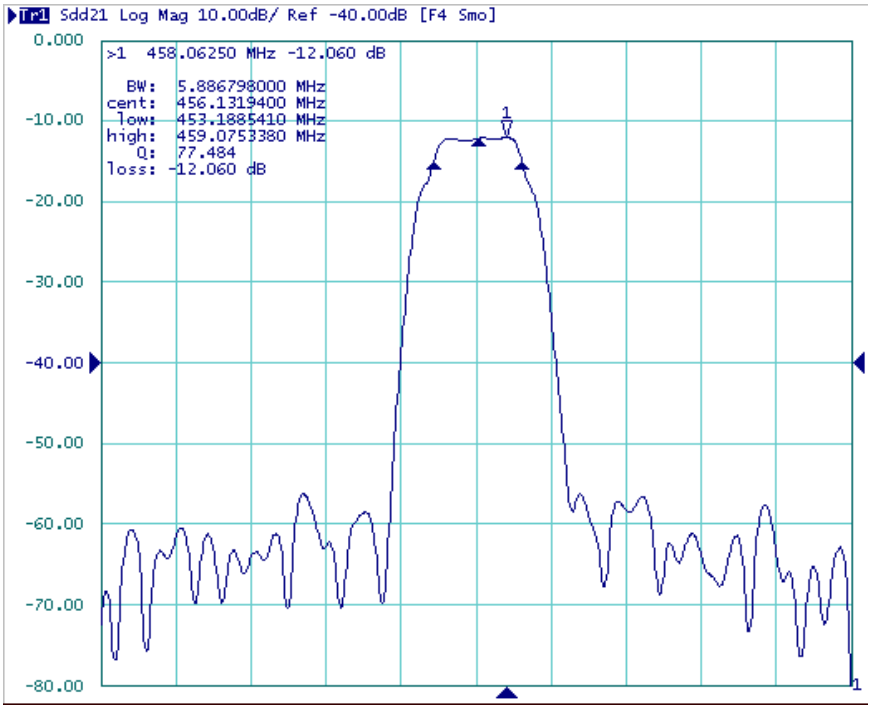


Fig.1. Horizontal: 5MHz/Div Vertical: 10dB/Div

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Pass band Ripple

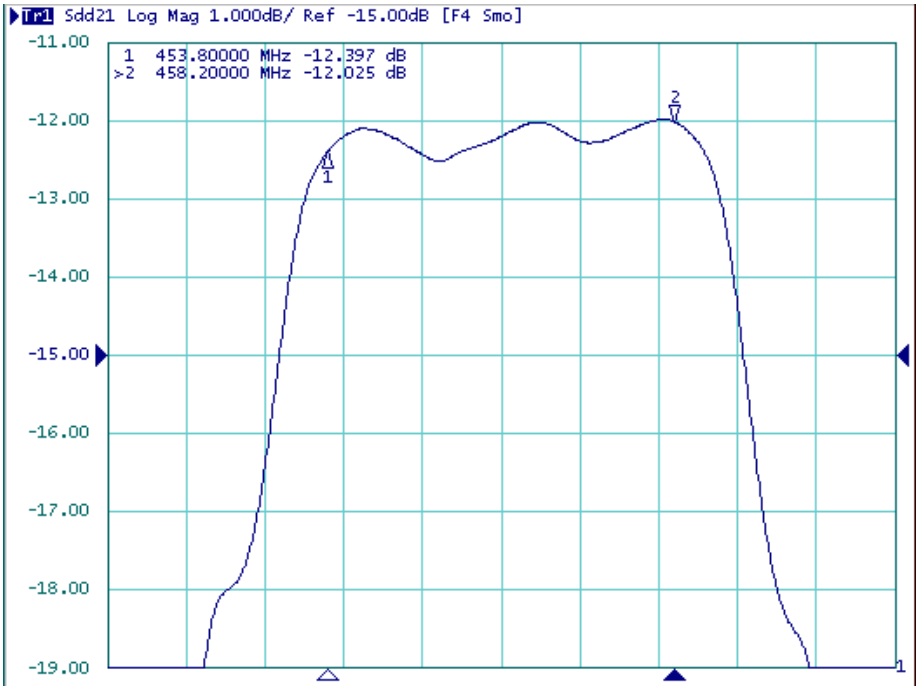


Fig.2. Horizontal: 1.5MHz/Div Vertical: 1dB/Div

Group Delay Ripple

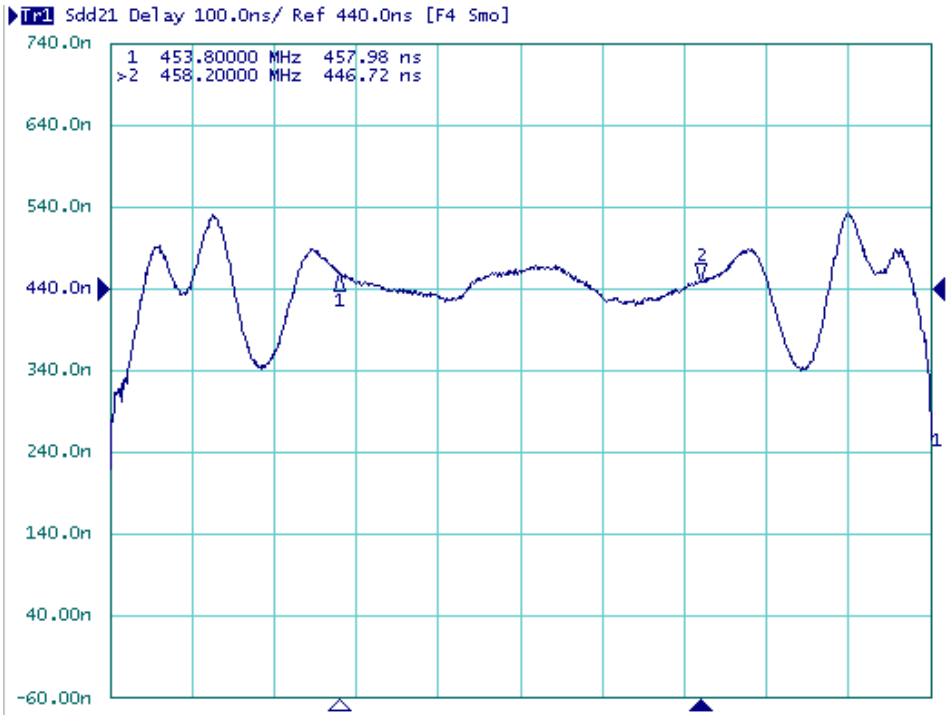


Fig.3. Horizontal: 1.5MHz/Div Vertical: 200nS/Div

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Wide band Response

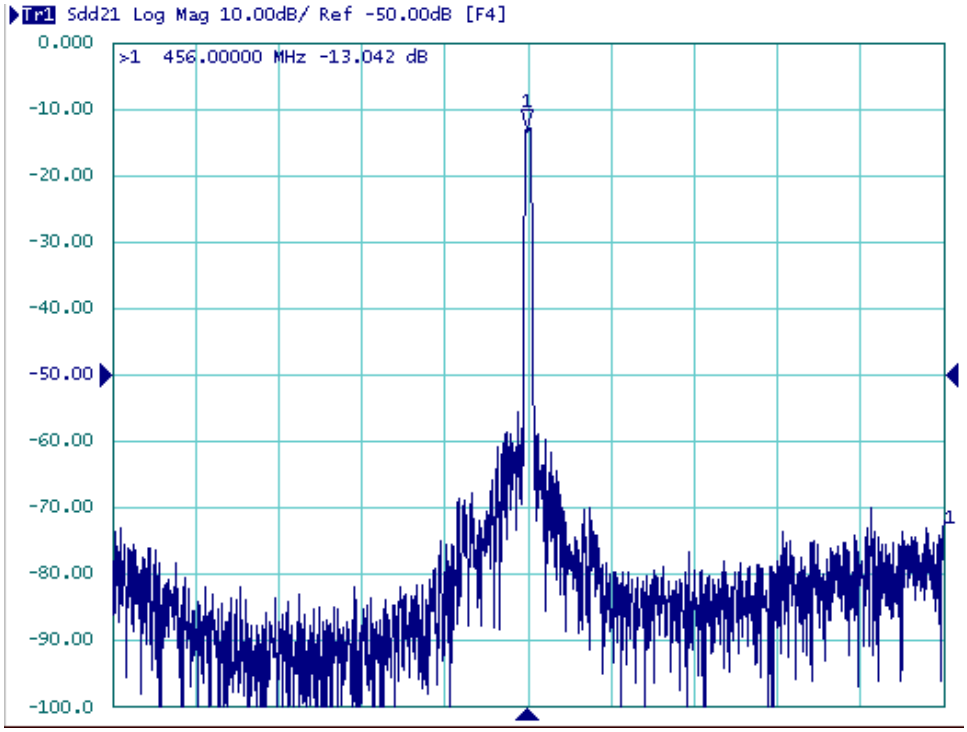
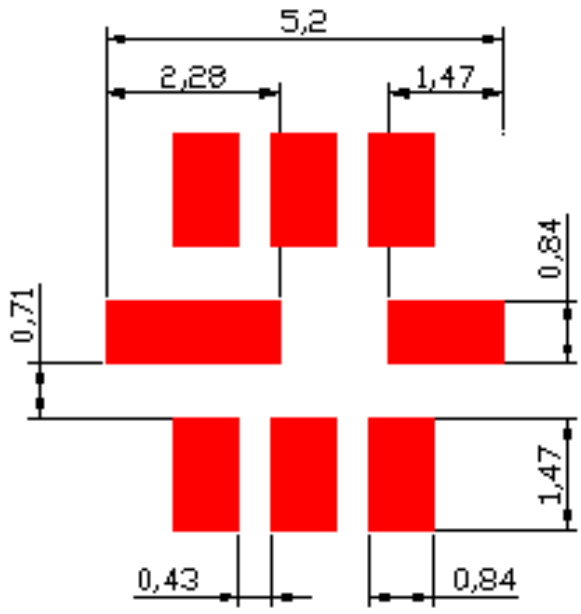


Fig4. Horizontal: 10MHz ~ 946MHz Vertical: 10dB/Div

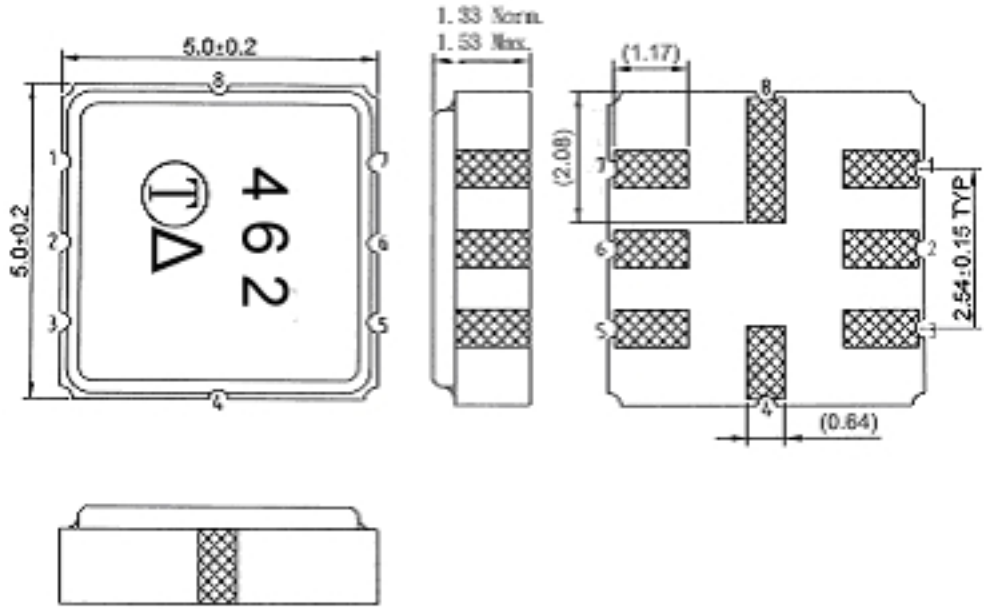
E. PCB FOOTPRINT:



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F. OUTLINE DRAWING:



1, 2: Balanced Input

5, 6: Balanced Output

3, 4, 7, 8: To be Ground

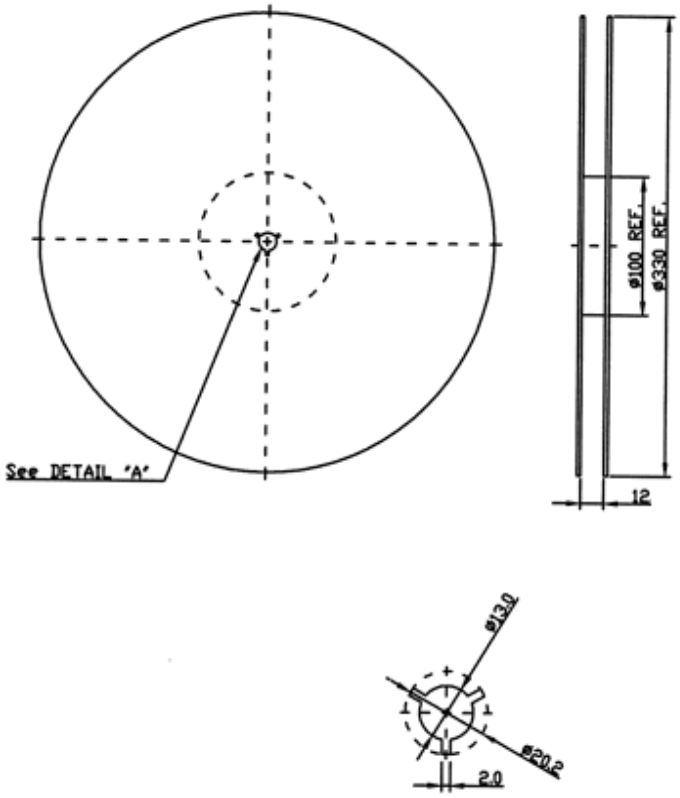
Unit: mm

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G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

