

SAW Filter 456MHz
Part No: MA09960

Model: TB0427A
Rev No: 2

A. MAXIMUM RATING:

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

B. CHARACTERISTICS:

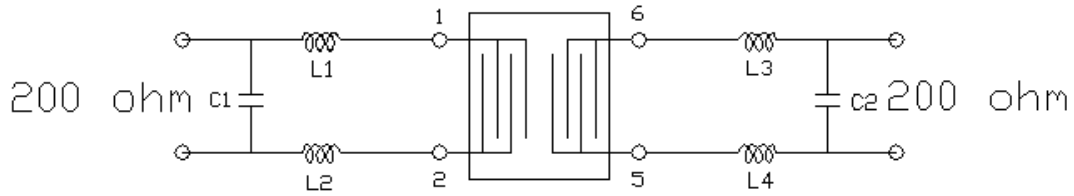
1. Ambient Temperature: 25°C
2. Optimal Source Impedance (Balanced): 200Ω
3. Optimal Load Impedance (Balanced): 200Ω

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center Frequency Fc MHz	-	456	-	-
Minimum Insertion Loss (452.1 ~ 459.9MHz) dB		7.4	9	
Passband Ripple (452.1 ~ 459.9MHz) dB	-	0.7	1.25	-
30dB Bandwidth MHz		17.5	18.0	
Attenuation: (Reference level from minimum insertion loss) dB				
10MHz ~ 256MHz dB	30	62	-	-
256MHz ~ 360 MHz dB	40	57	-	-
360MHz ~ 421MHz dB	45	52	-	-
421MHz ~ 441MHz dB	40	45	-	-
441MHz ~ 443.25MHz dB	36	44	-	-
471.55MHz ~ 491MHz dB	40	45	-	-
491MHz ~ 551MHz dB	45	52	-	-
552MHz ~ 656MHz dB	40	62	-	-
656MHz ~ 946MHz dB	30	62	-	-
Absolute Group Delay at Fc nS	-	418	450	-
Group Delay Ripple (451.8 ~ 460.2MHz) dB	-	26	75	-
Input Return Loss (452.1 ~ 459.9MHz) dB	10	15	-	-
Output Return Loss (452.1 ~ 459.9MHz) dB	10	14	-	-
Temp Coefficient ppm/°C	-23			

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C. MEASUREMENT CIRCUIT:



$C1=3.9\text{pF}$ $L1=L2=15\text{nH}$ $C2=4.7\text{pF}$ $L3=L4=18\text{nH}$

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D. FREQUENCY CHARACTERISTICS:

1. S21 Response

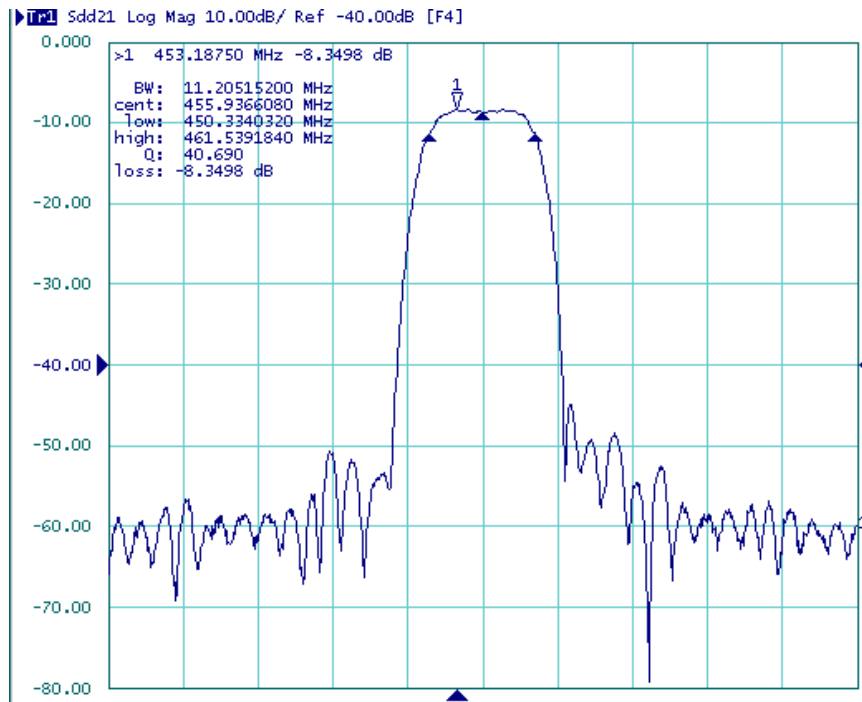


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

2. Pass band Ripple

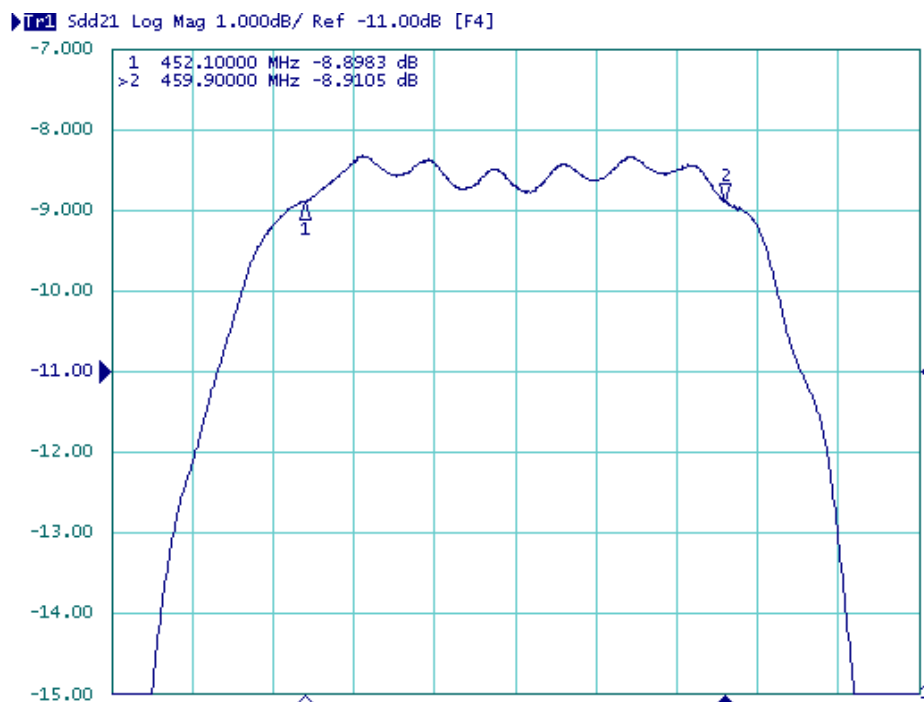


Fig2. Horizontal: 1.5MHz/Div Vertical: 1dB/Div

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3. Group Delay Ripple

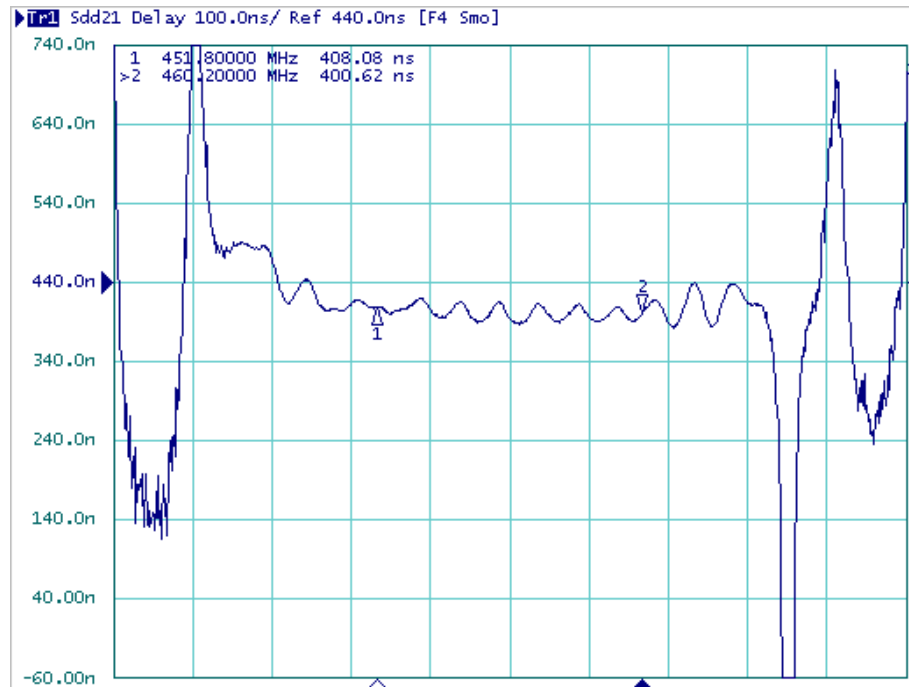


Fig3. Horizontal: 2.5MHz/Div Vertical: 100nS/Div

4. Wide band Response

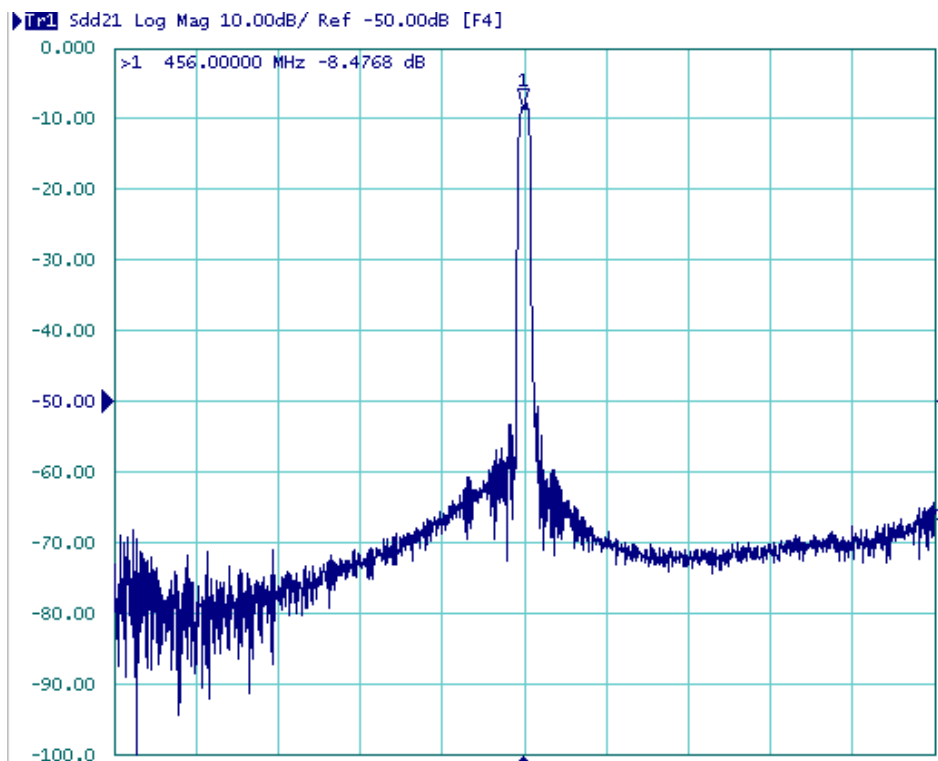
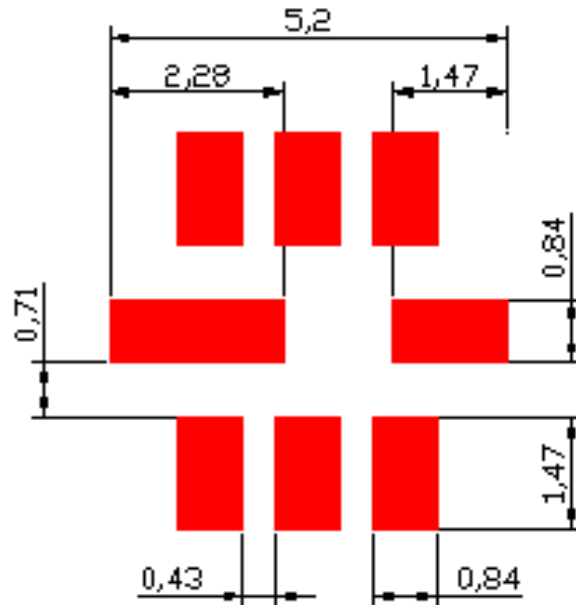


Fig4. Horizontal: 10MHz ~ 946MHz Vertical: 10dB/Div

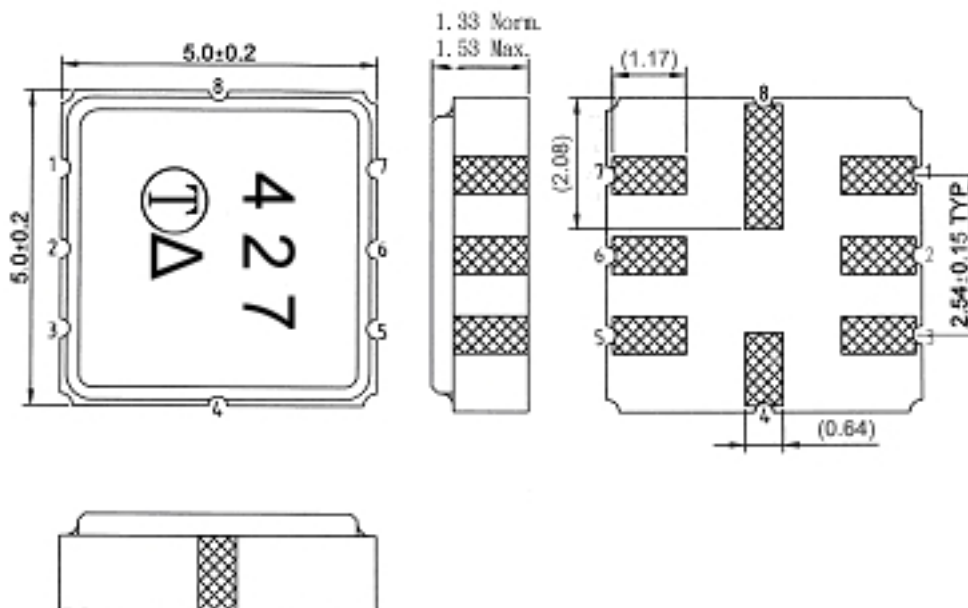
SAW Filter 456MHz
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E. PCB FOOTPRINT:



F. OUTLINE DRAWING:



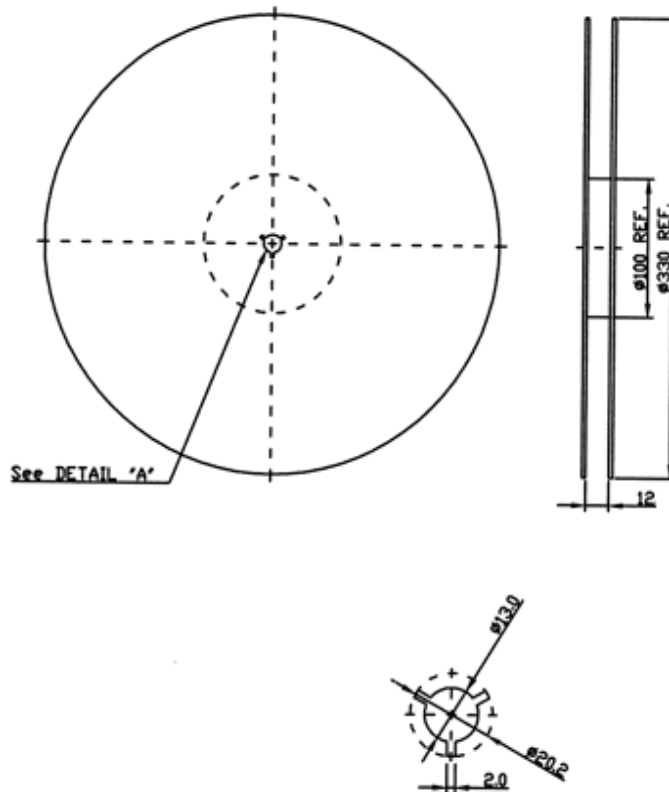
- 1, 2: Balanced Input
 - 5, 6: Balanced Output
 - 3, 4, 7, 8: To be Ground
- Unit: mm

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G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

