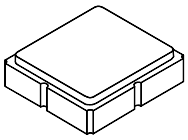
RFMi
A BRAND OF AKOUSTIS

Preliminary

RoHS compliant

SF2625E

500 MHz SAW Filter



SM3030-8

Automotive grade product

MAXIMUM RATING:

Input Power Level: 10 dBm

- DC Voltage : 3V
- Operating Temperature: -30°C to +85°C
- Storage Temperature: -40°C to +85°C
- Implementation of IIP3: 30dBm min.
- Moisture Sensitivity Level: 1
- AEC-Q200 Qualified

ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25 °C

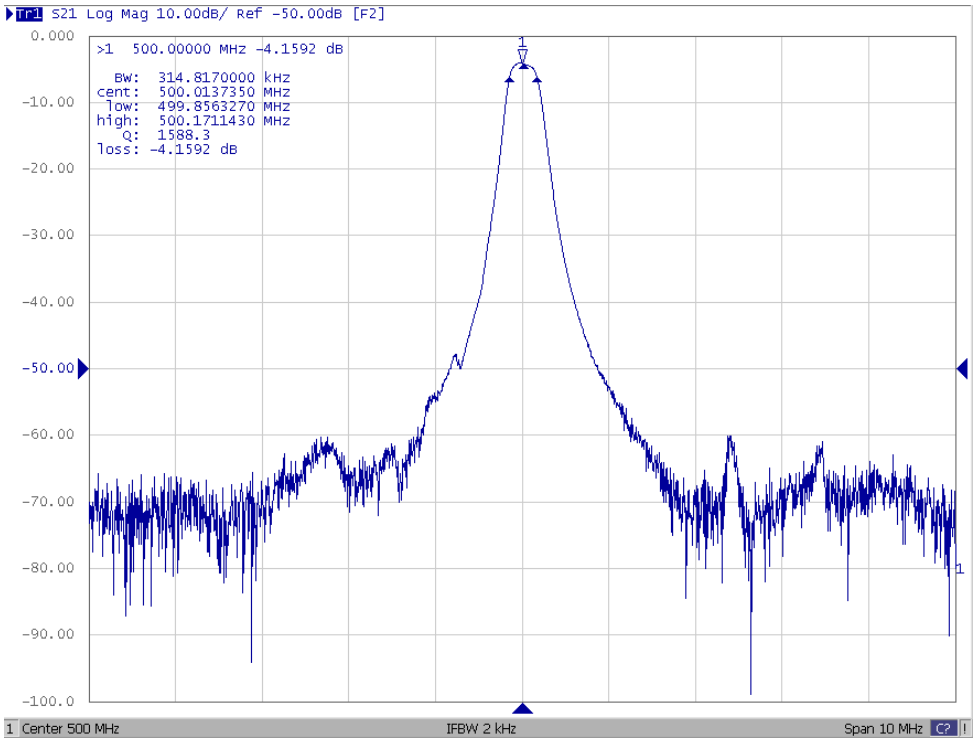
Item		Unit	Min.	Typ.	Max.
Center frequency	**Fc**	MHz	-	500	-
Max. Insertion loss (**Fc ± 75 kHz**) **(Including loss in matching elements)**	**IL**	dB	-	4.0	7.5
Passband Ripple (**Fc ± 75 kHz**)		dB	-	0.4	2.0
Group Delay Ripple **(Fc ± 75 kHz)**		µsec	-	0.45	2.0
Relative Attenuation **(relative to** IL**)**					
Fc - 100 to **Fc** - 1.5	MHz	dB	35	52	-
Fc - 1.5 to **Fc** - 0.8	MHz	dB	20	44	-
Fc - 0.8 to **Fc** - 0.6	MHz	dB	10	40	-
Fc - 0.6 to **Fc** - 0.4	MHz	dB	7	24	-
Fc + 0.4 to **Fc** + 0.6	MHz	dB	7	22	-
Fc + 0.6 to **Fc** + 0.8	MHz	dB	10	35	-
Fc + 0.8 to **Fc** + 1.5	MHz	dB	20	43	-
Fc + 1.5 to **Fc** + 100	MHz	dB	35	52	-
Temperature coefficient of frequency		**TCf**	-0.036 ppm/ºC [2]		

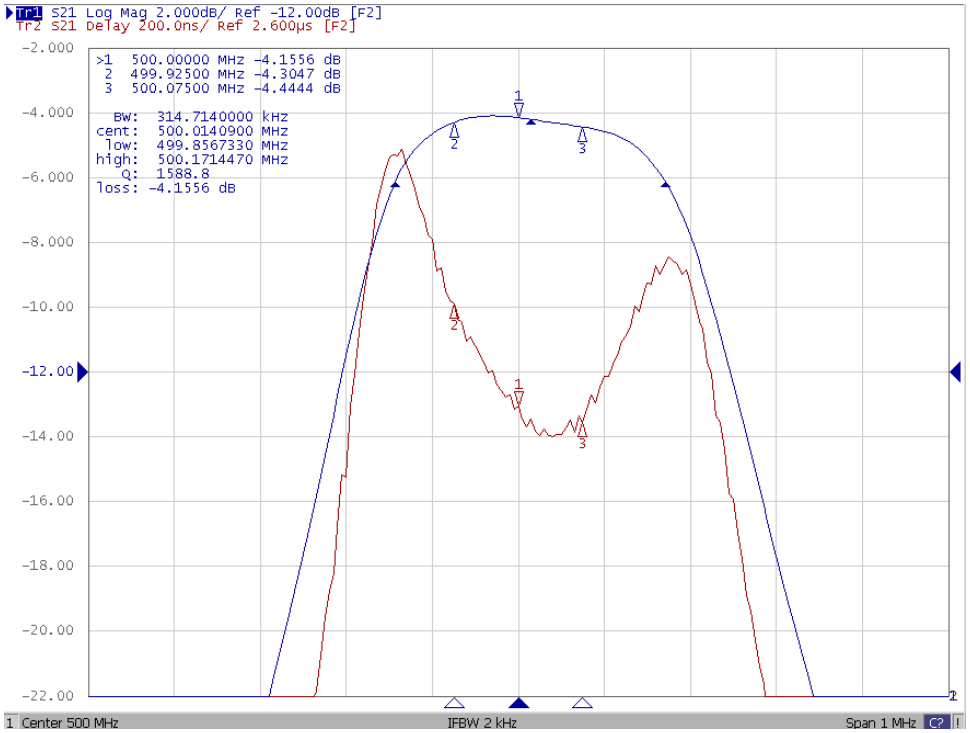
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

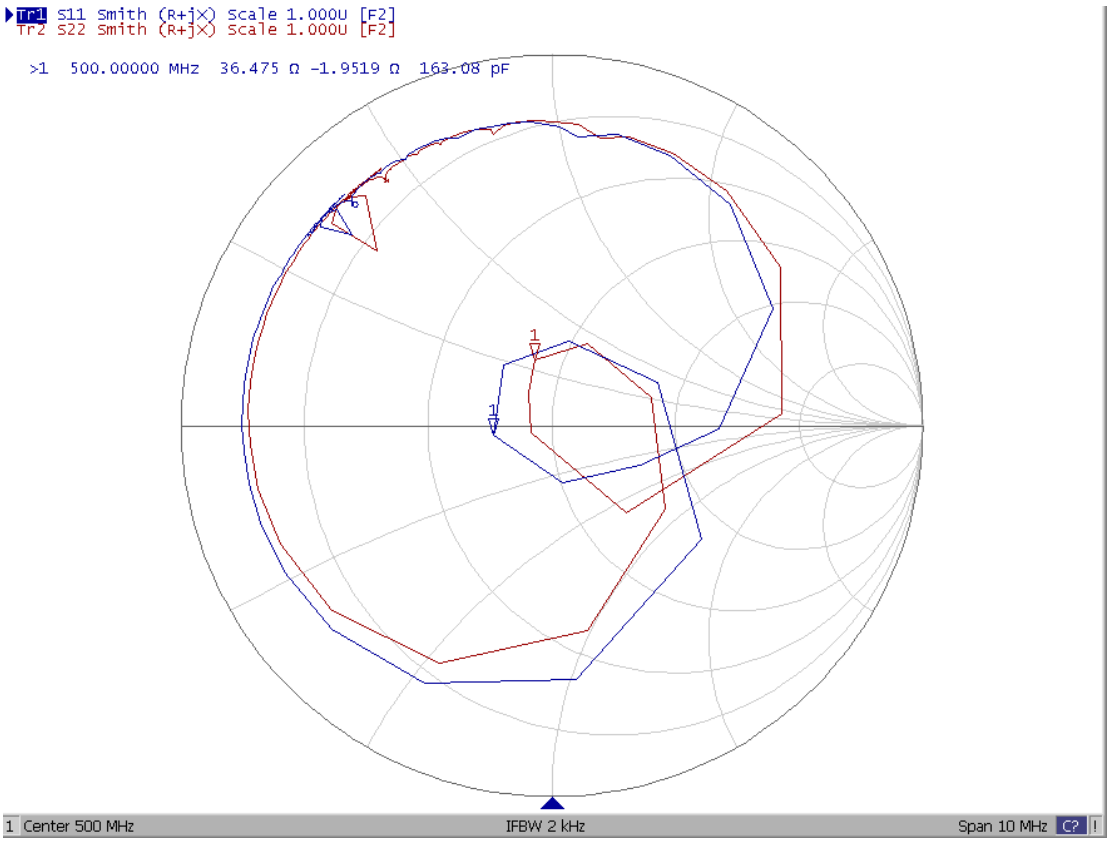
NOTES:

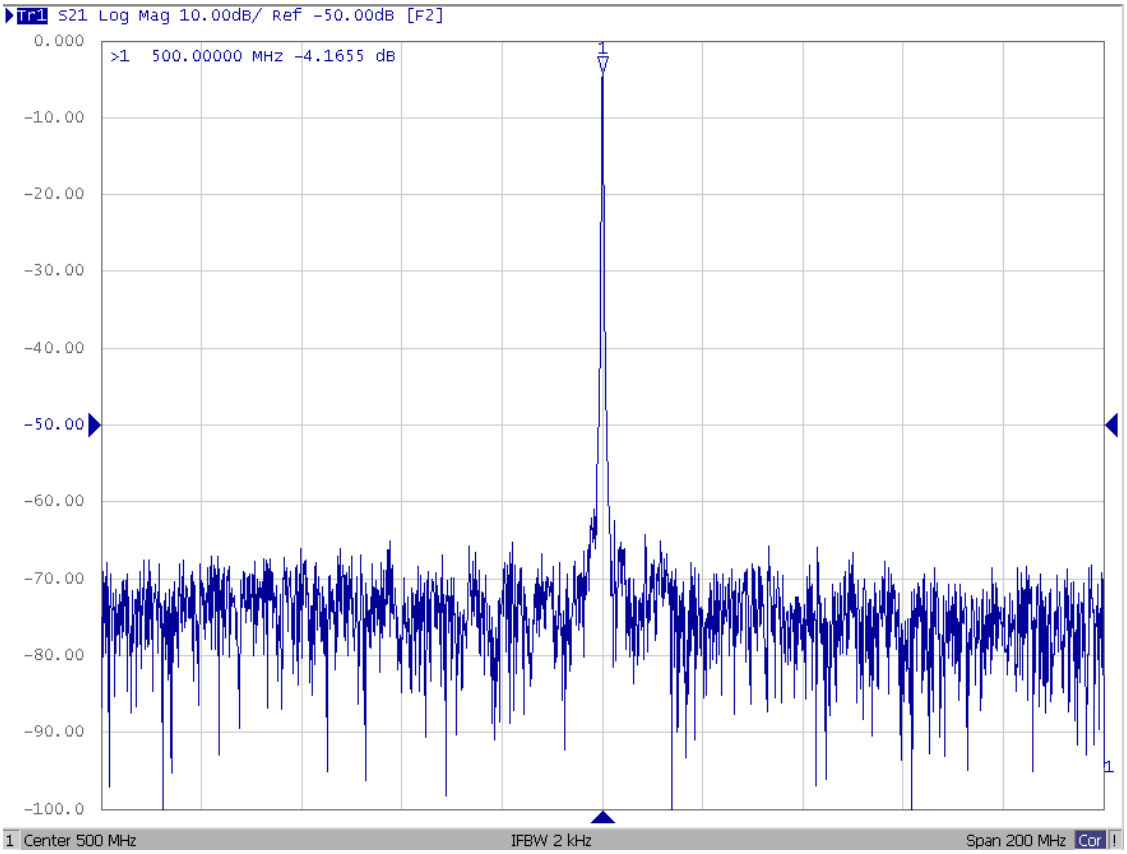
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

FREQUENCY CHARACTERISTICS:



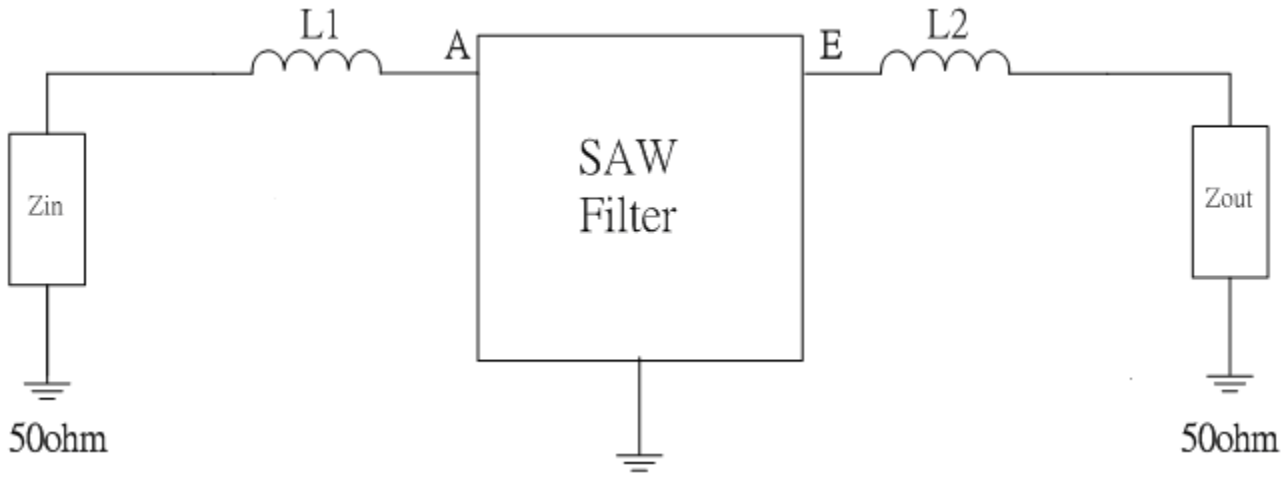



Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
Tr2 S22 Smith (R+jX) Scale 1.000U [F2]
>1 500.00000 MHz 36.475 Ω -1.9519 Ω 163.08 pF
1 Center 500 MHz
IFBW 2 kHz
Span 10 MHz


Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]
>1 500.00000 MHz -4.1655 dB
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
1 Center 500 MHz
IFBW 2 kHz
Span 200 MHz

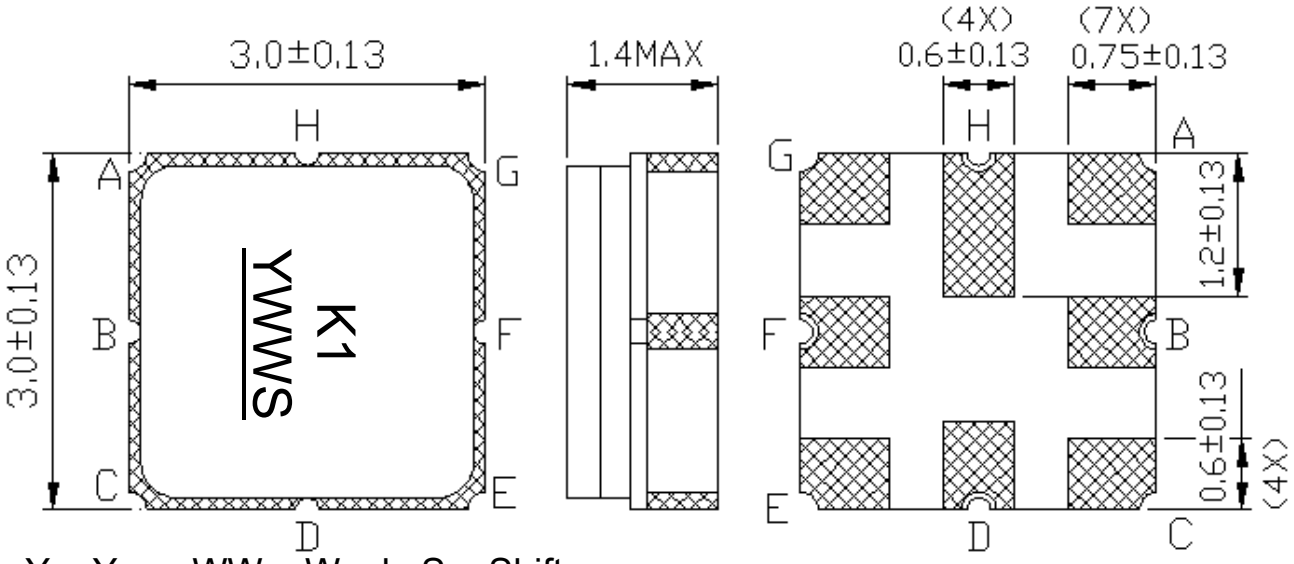
MEASUREMENT CIRCUIT:

50 Ohm Test circuit (single-ended / single-ended)



L1=L2=56nH

OUTLINE DRAWING:



Y = Year, WW = Week, S = Shift

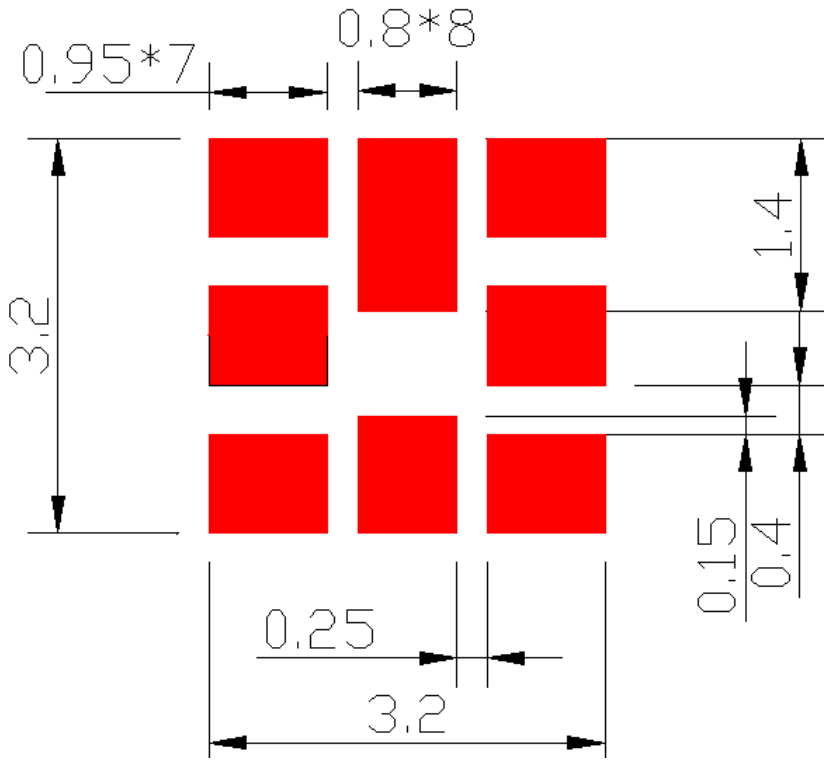
#A: Input

#E: Output

Others: To be grounded

Unit mm

PCB FOOTPRINT:

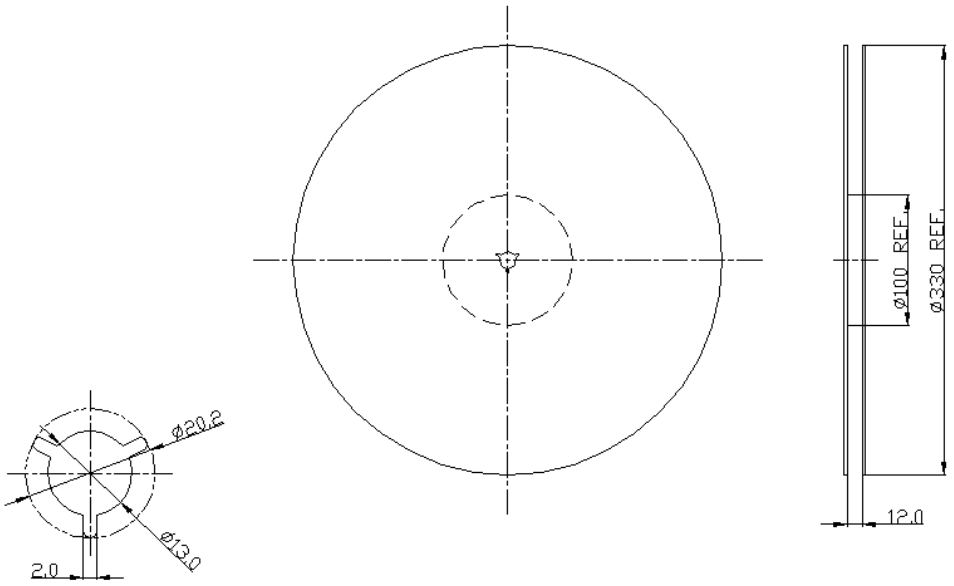


Packing

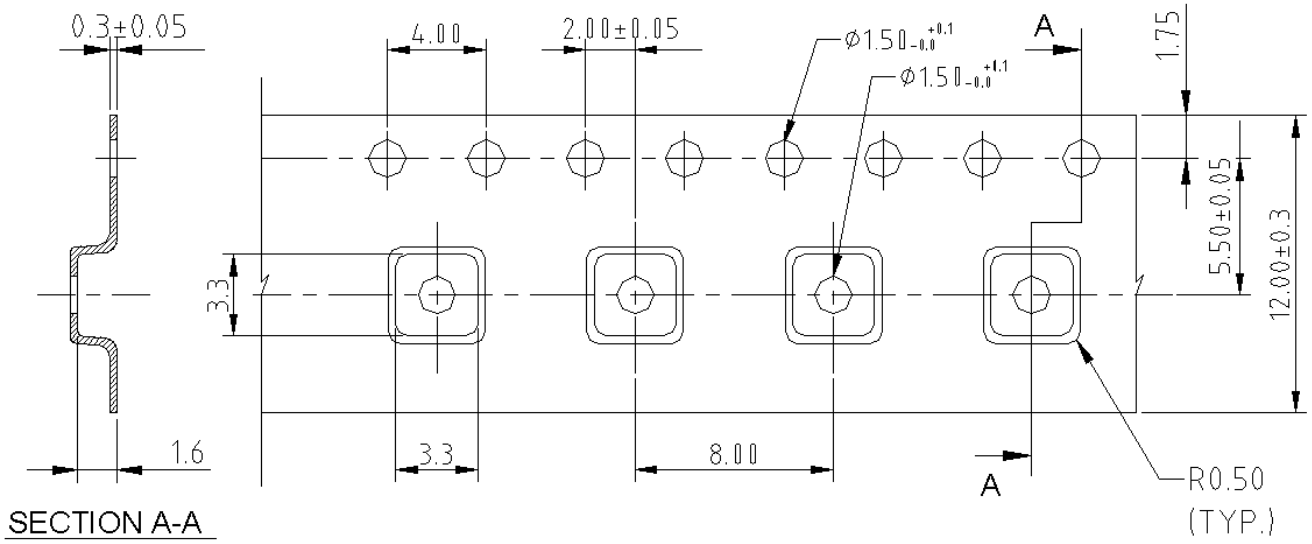
Reel Dimension

Tape and Reel Standard per ANSI/EIA-481

Reel Count:
7" = 500
13" = 3000



Tape Dimension



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180ºC for 60~90 seconds.
2. Ascending time to preheating temperature 150ºC shall be 30 seconds min.
3. Heating shall be fixed at 220ºC for 50~80 seconds and at 260ºC +0/-5ºC peak (10 seconds).
4. Time: 5 times maximum.