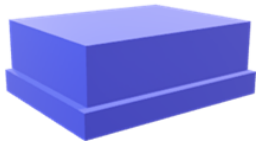
RFMi
BRAND OF AKOUSTIS

RoHS compliant

SF2558LM

710 MHz SAW Filter



SM1109

MAXIMUM RATING

- Input Power Level: 10 dBm (In passband)
- DC Voltage: +/-5 V
- Operating Temperature: -30 °C to +85 °C
- Storage Temperature: -40 °C to +100 °C
- Moisture Sensitive Level: Level 1 (MSL1)
- ESD: 100 V(MM), 200 V(HBM)

ELECTRICAL CHARACTERISTICS

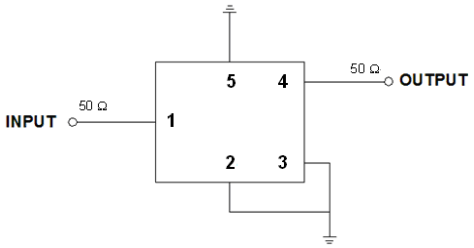
Terminating source impedance: Zs=50 Ω

Terminating load impedance: Z_L=50 Ω

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency	**Fc**	MHz	-	710	-
Insertion Loss (704~716 MHz)	**IL**	dB(*1)	-	1.3	1.8
Amplitude Ripple(704~716 MHz)		dB	-	0.4	1.0
VSWR (704~716 MHz)		-	-	1.5	2.0
Attenuation (Reference level from 0 dB)					
DC ~ 674 MHz		dB	45	55	-
674 ~ 686 MHz		dB	35	47	-
734 ~ 746 MHz		dB	28	33	-
869 ~ 1800 MHz		dB	35	45	-
1800 ~ 3000 MHz		dB	25	40	-
3000 ~ 4000 MHz		dB	20	38	-
4000 ~ 5000 MHz		dB	20	37	-
5000 ~ 6000 MHz		dB	20	37	-

(*1) Specification of insertion loss includes loss that comes from the test board. (0.05 dB)

MEASUREMENT CIRCUIT

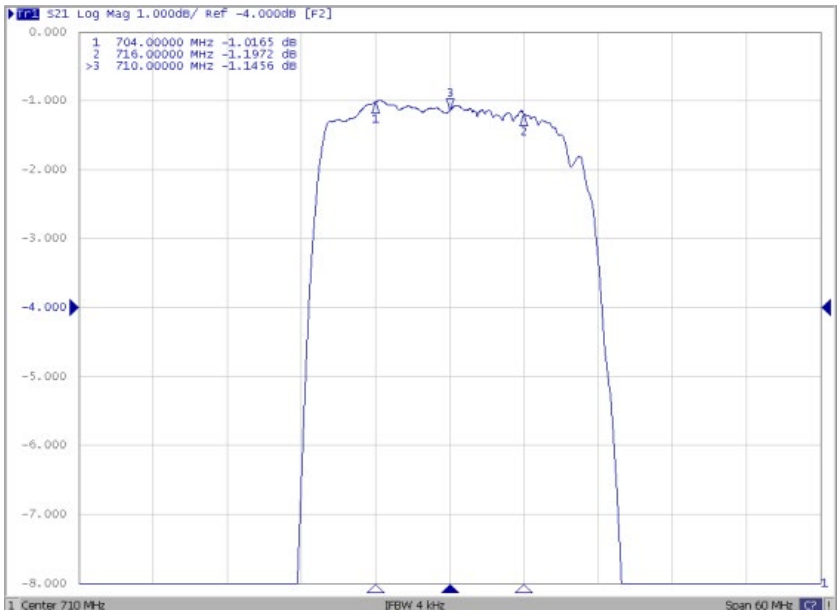


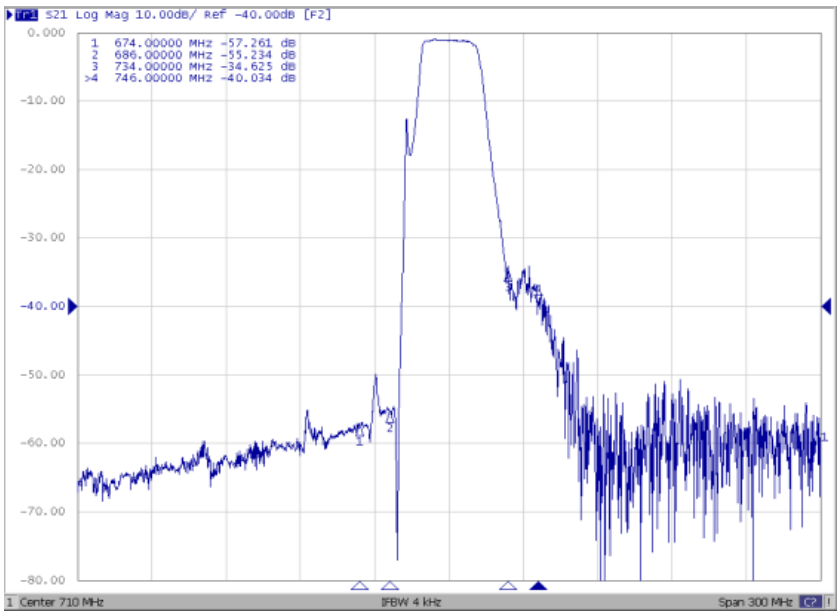
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

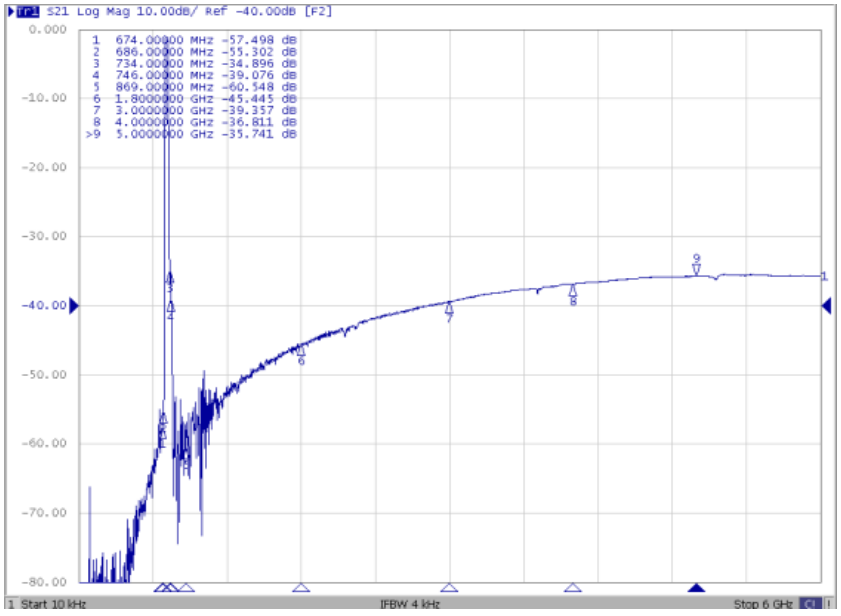
NOTES:

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 CHARATERISTIC

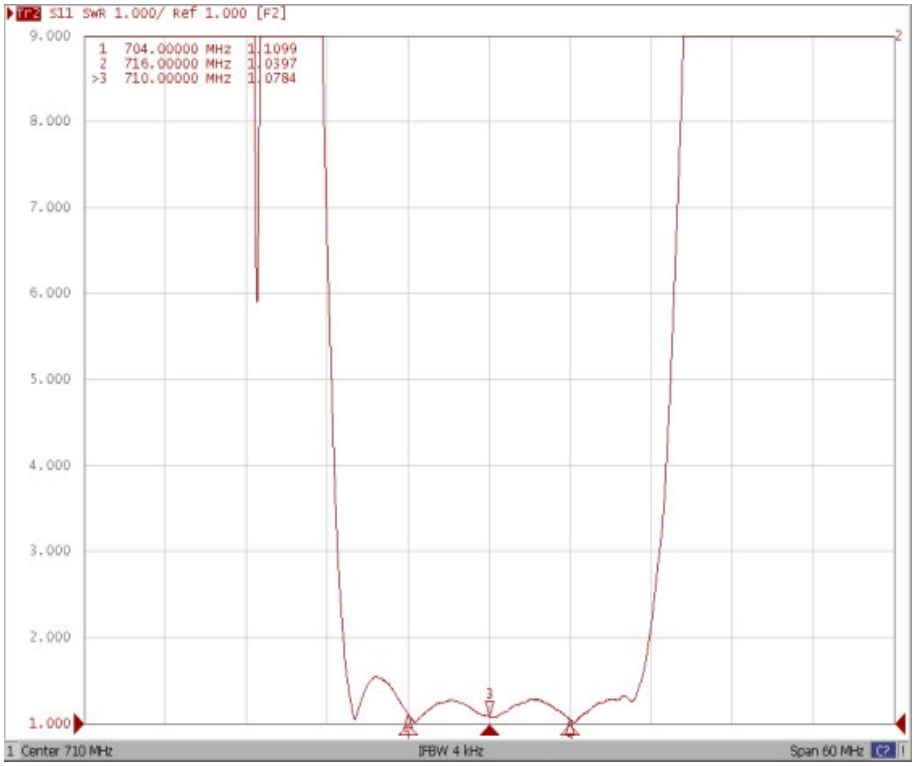




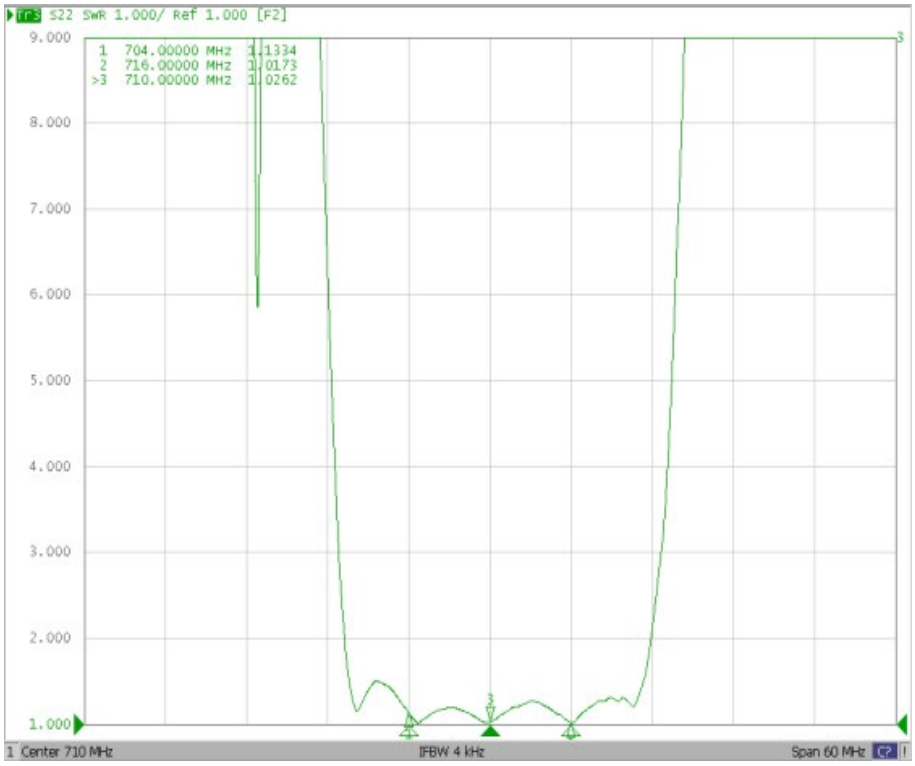


Reflection Functions:

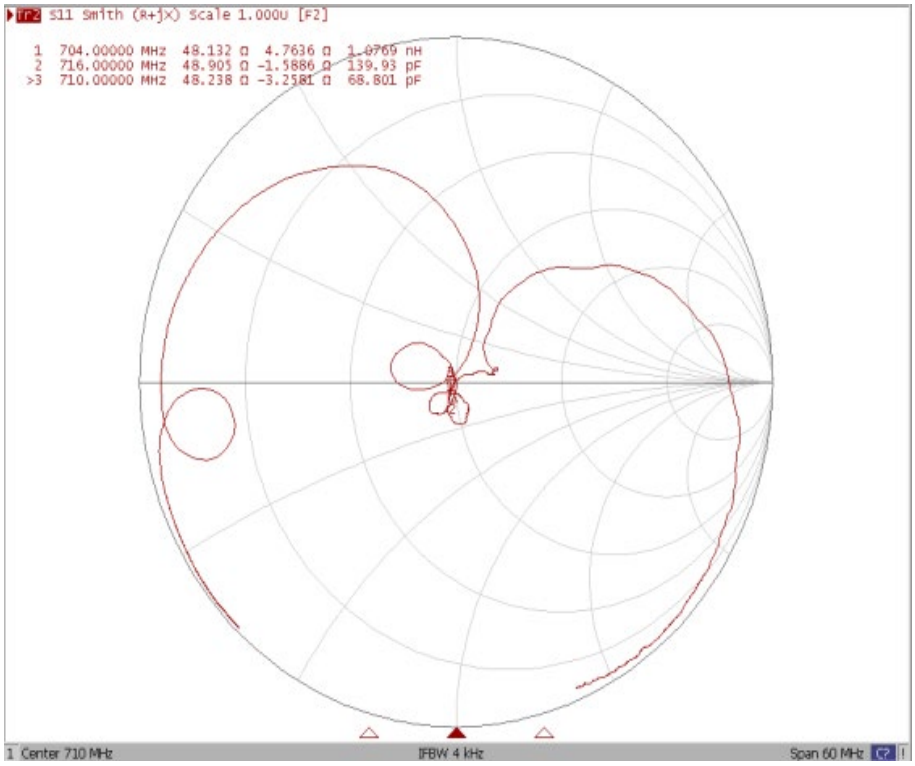
VSWR S11



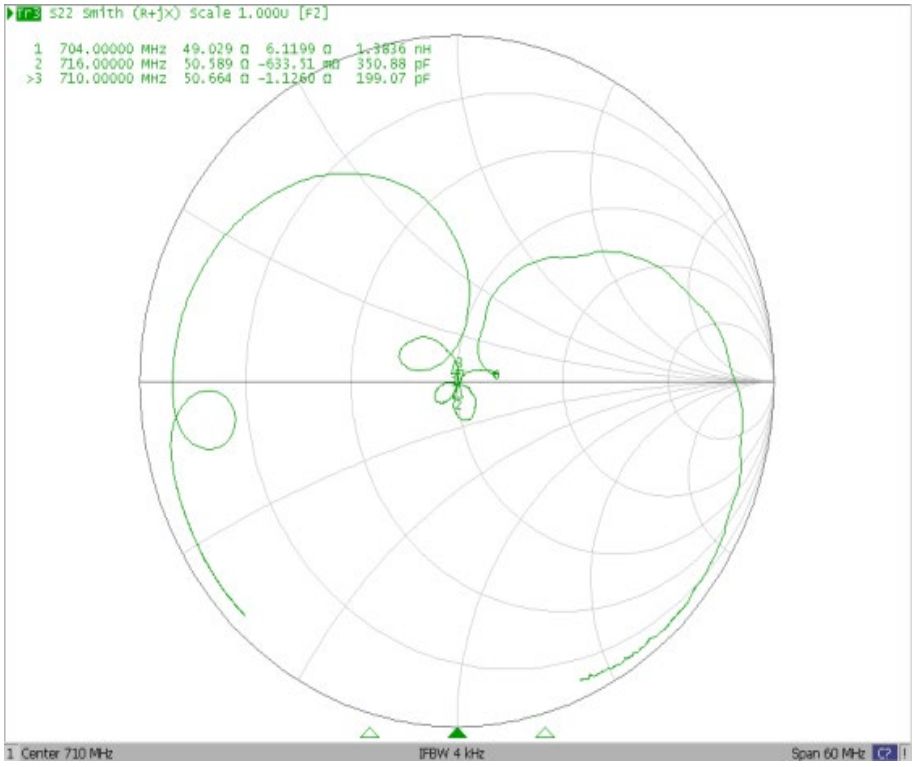
VSWR S22



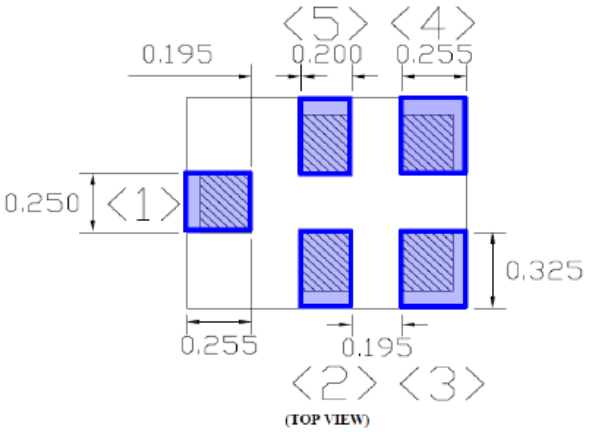
Smith Chart S11



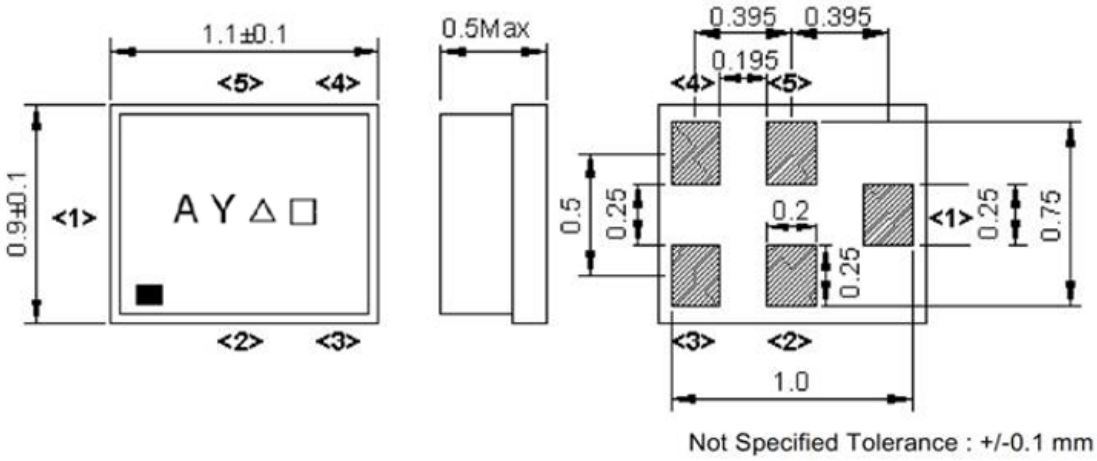
Smith Chart S22



PCB Footprint



OUTLINE DRAWING (Mass Production):



Pin Configuration

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

△ : Date Code

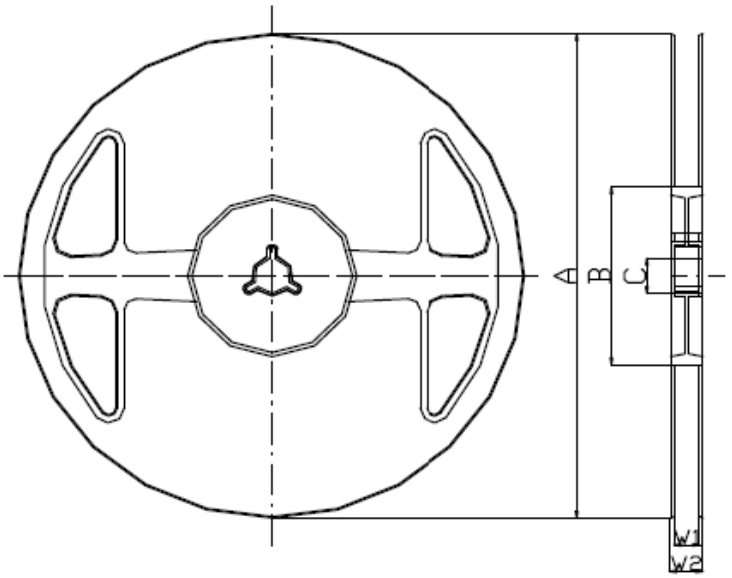
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z
2021	A	B	C	D	E	F	G	H	J	K	L	M

Reel Count
7" = 3000
13" = 10,000

PACKING:

REEL DIMENSION



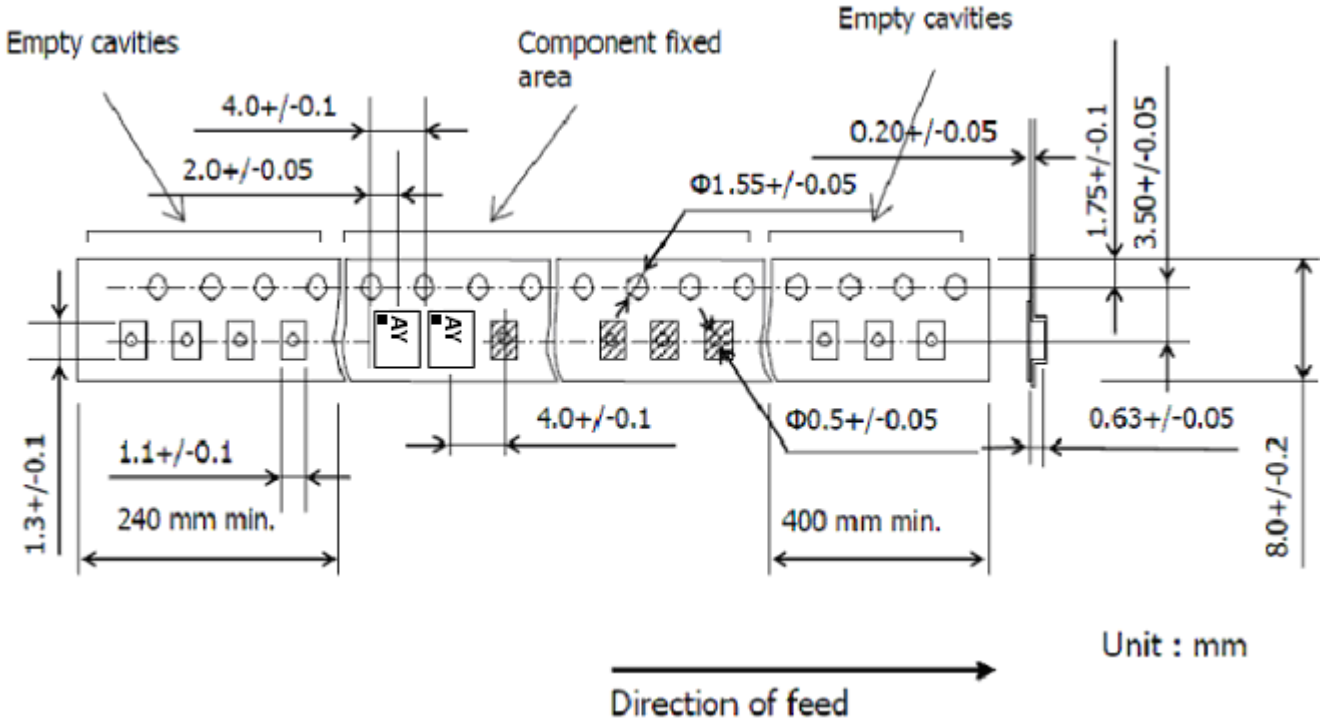
Materials of Reel

Material : Polystyrene + Carbon
Color : Black
Surface resistance (reference value) : $10^9\Omega$/sq Max.

Unit : mm

A	B	C	W1	W2
ϕ 180.0 +0.0/-1.5	ϕ 66.0 +/-0.5	ϕ 13.0 +/-0.2	9.0 +1.0/-0.0	11.4 +/-1.0

TAPE DIMENSION



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.