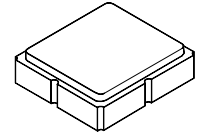


**SF2625D**

**500 MHz  
SAW Filter**



SM3030-8

**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:**

Item	Unit	Min.	Typ.	Max.	
<b>Center frequency</b>	<b>Fc</b>	MHz	-	500	-
<b>Max. Insertion loss (Fc ± 75 kHz) (excluding loss in matching elements)</b>	<b>IL</b>	dB	-	4.2	6.0
<b>Max. Insertion loss (Fc ± 75 kHz) (including loss in matching elements)</b>	<b>IL</b>	dB	-	4.7	7.5
<b>Passband Ripple (Fc ± 75 kHz)</b>		dB	-	0.3	2
<b>Group Delay Ripple (Fc ± 75 kHz)</b>		μ sec	-	0.4	2
<b>Relative Attenuation (relative to IL)</b>					
<b>Fc - 100 to Fc - 1.5</b>	MHz	dB	35	53	-
<b>Fc - 1.5 to Fc - 0.8</b>	MHz	dB	20	46	-
<b>Fc - 0.8 to Fc - 0.6</b>	MHz	dB	10	38	-
<b>Fc - 0.6 to Fc - 0.4</b>	MHz	dB	7	25	-
<b>Fc + 0.4 to Fc + 0.6</b>	MHz	dB	7	25	-
<b>Fc + 0.6 to Fc + 0.8</b>	MHz	dB	10	37	-
<b>Fc + 0.8 to Fc + 1.5</b>	MHz	dB	20	46	-
<b>Fc + 1.5 to Fc + 100</b>	MHz	dB	35	53	-
<b>Turnover To</b>		°C	10	25	40
<b>Temperature coefficient of frequency</b>		TCf	-0.036 ppm/K <sup>2</sup>		



**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:

## (1) Wide band Response:

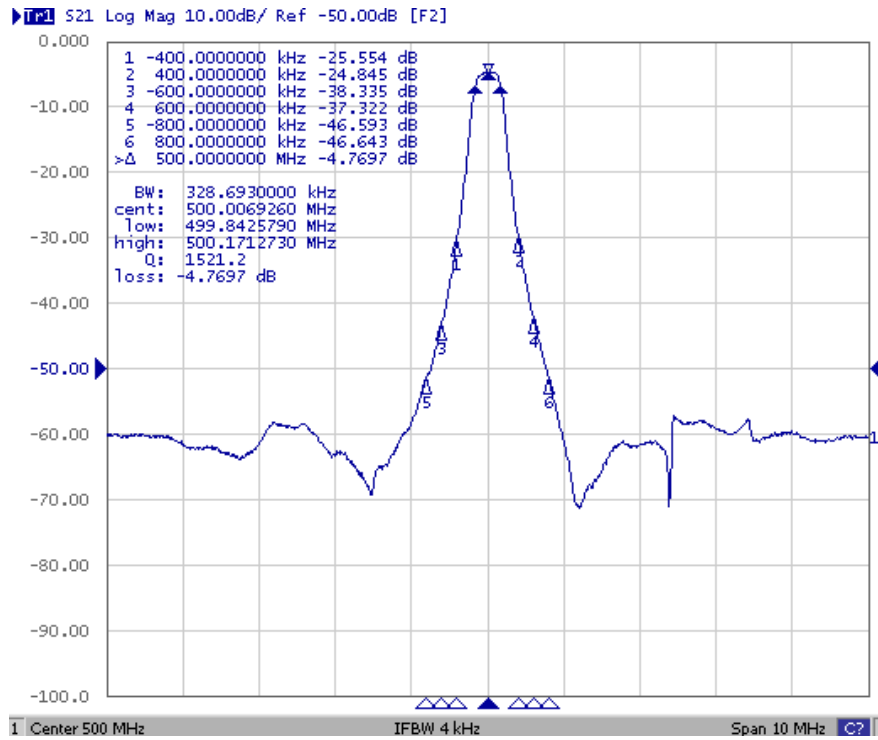


Fig1. Horizontal: 1MHz/Div Vertical: 10dB/Div

## (2) Pass band Response and Group Delay Response:

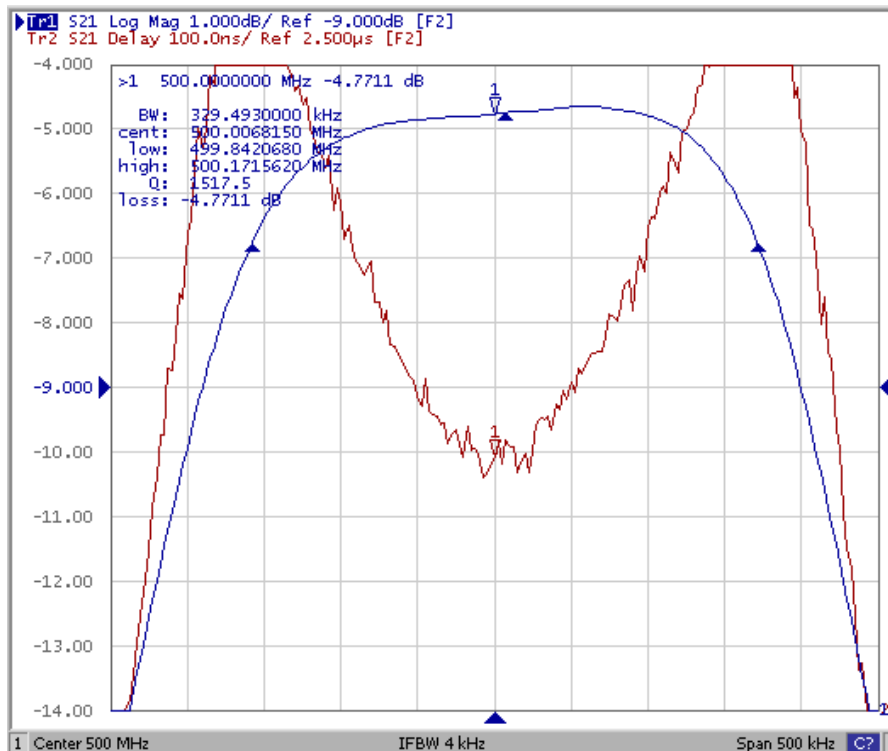
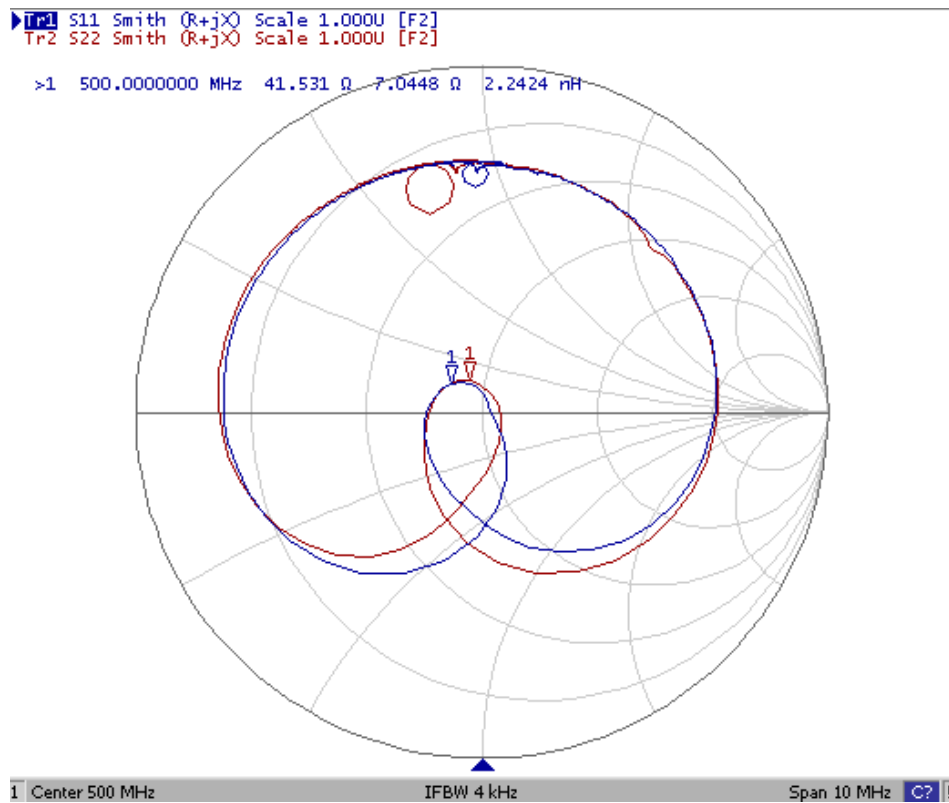


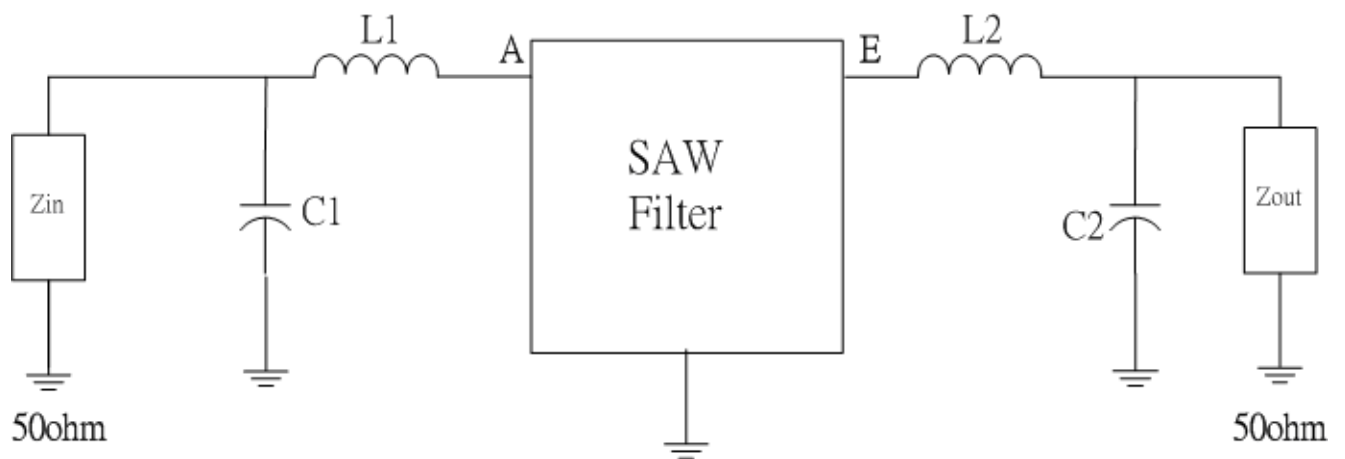
Fig2. Horizontal: 0.05MHz/Div Vertical: 1dB/Div  
Vertical: 100ns/Div

### (3) Smith Chart:



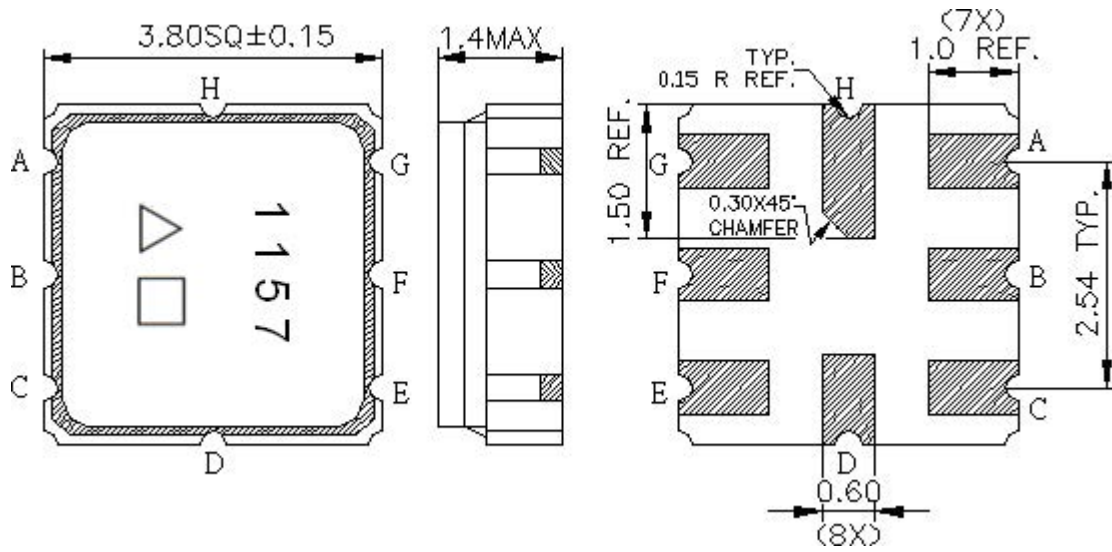
### MEASUREMENT CIRCUIT:

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



L1=47nH L2=47nH C1=4pF C2=4pF

**OUTLINE DRAWING:**



**#A Input**

**#B Input ground**

**#E Output**

**#F Output ground**

**#C, D, G, H To be grounded**

**△ Year code**

**□ Date code**

**Unit mm**

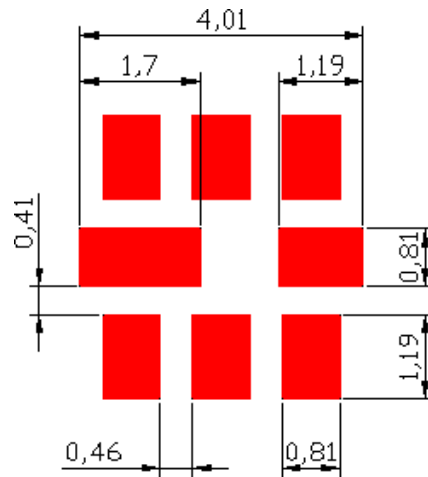
**△ : Product Year Code**

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	<u>B</u>	<u>b</u>

**□ : Data Code**

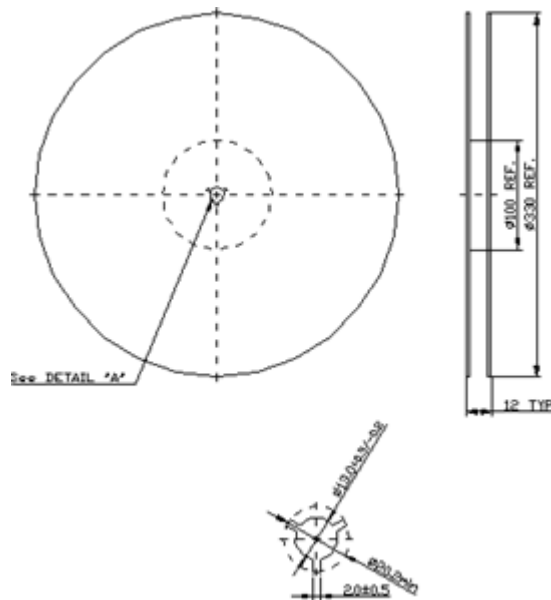
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

**PCB Footprint:**

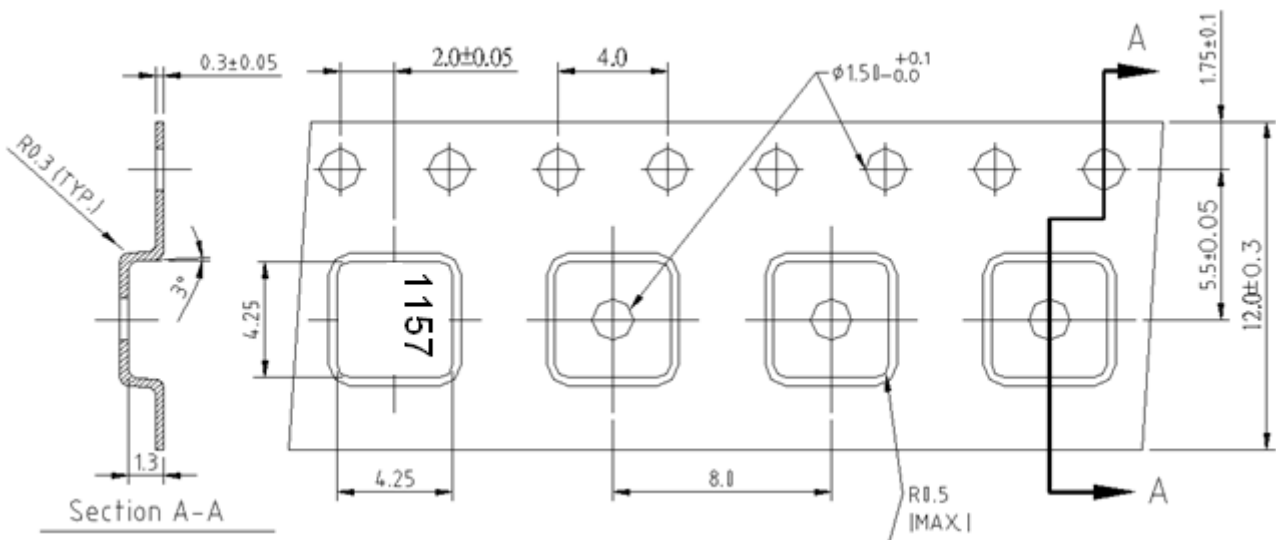


**PACKING: REEL DIMENSION**

Reel Count:  
 7" = 1000  
 13" = 3000



**2. TAPE DIMENSION**



### RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 245~260°C peak (min. 10sec).
4. Time : 2 times.

