RFMi
BRAND OF AKOUSTIS

RoHS compliant

SF2560LM

881.5 MHz SAW Filter

SM1109

MAXIMUM RATING

- Maximum Input Power: 29 dBm
- DC voltage: 0 V
- Operating Temperature: -30°C to +85°C
- Storage Temperature: -40°C to +85°C
- Moisture Sensitivity Level: Level 1
- ESD 100V(MM) 200V(HBM)

ELECTRICAL CHARACTERISTICS

Terminating source impedance: Zs = 50 Ω (Unbalanced)

Terminating load impedance: ZL = 100 Ω (Balanced / differential)

Parameters Description		Unit	Min	Typ	Max	Remarks
Center Frequency (Fo)		MHz		881.5		
Insertion Loss	869.0 ~ 894.0MHz	dB(*1)	-	1.5	2.0	
Amplitude ripple	869.0 ~ 894.0MHz	dB_{p-p}	-	0.5	1.0	
VSWR	869.0 ~ 894.0MHz			1.6	2.0	
Attenuation:						
DC ~ 824.0 MHz		dB	50	65	-	
824.0 ~ 849.0 MHz		dB	50	56	-	
914.0 ~ 960.0 MHz		dB	25	35	-	
960.0 ~ 2000.0 MHz		dB	40	50	-	
2000.0 ~ 6000.0 MHz		dB	30	43	-	

Notes : (1) No Matching Network .

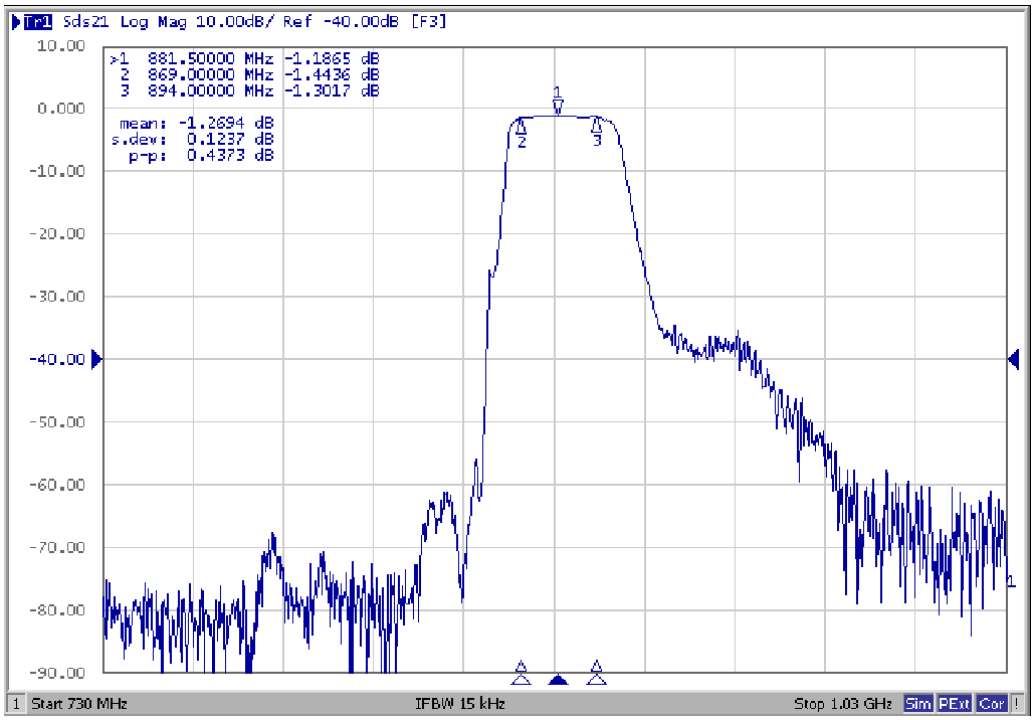
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

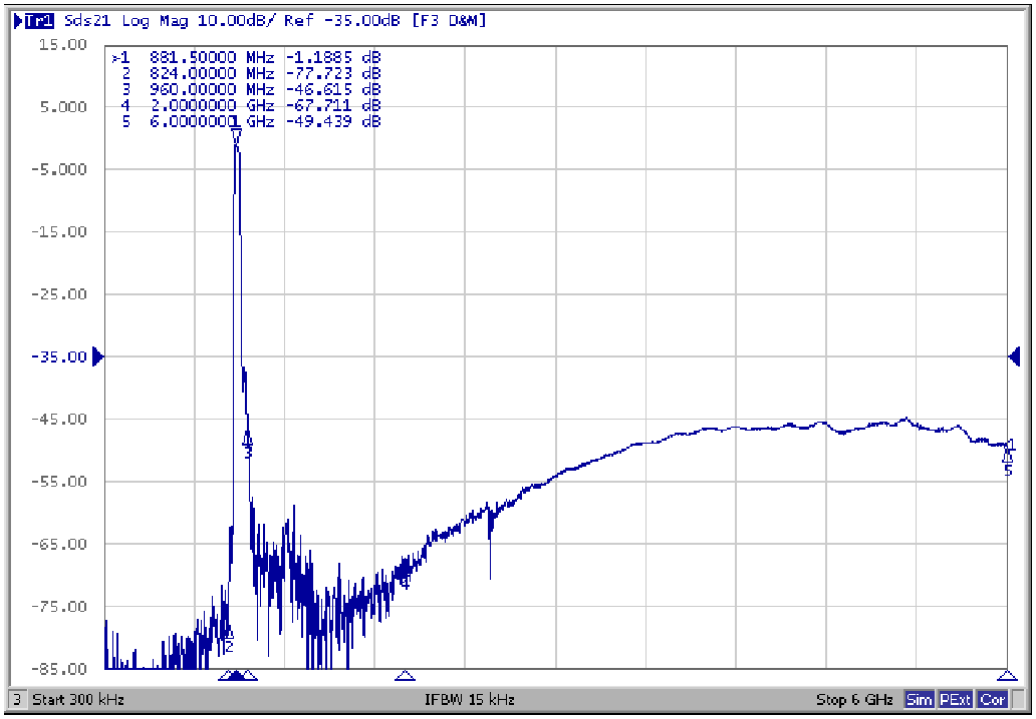
NOTES:

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.

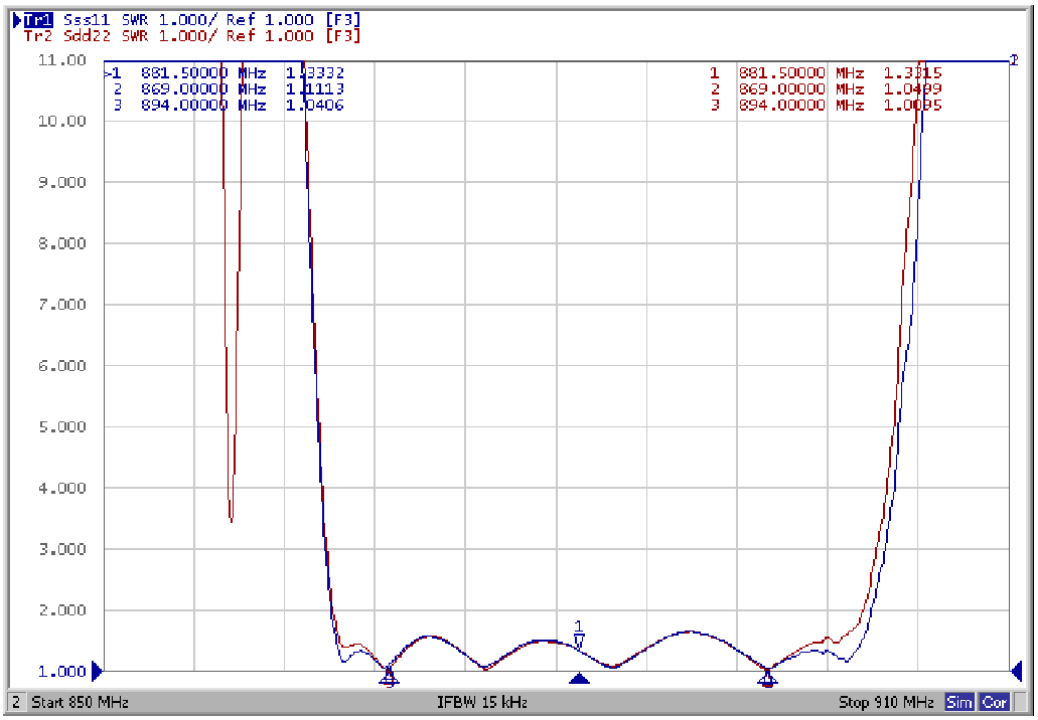
Frequency Characteristics

Frequency Response

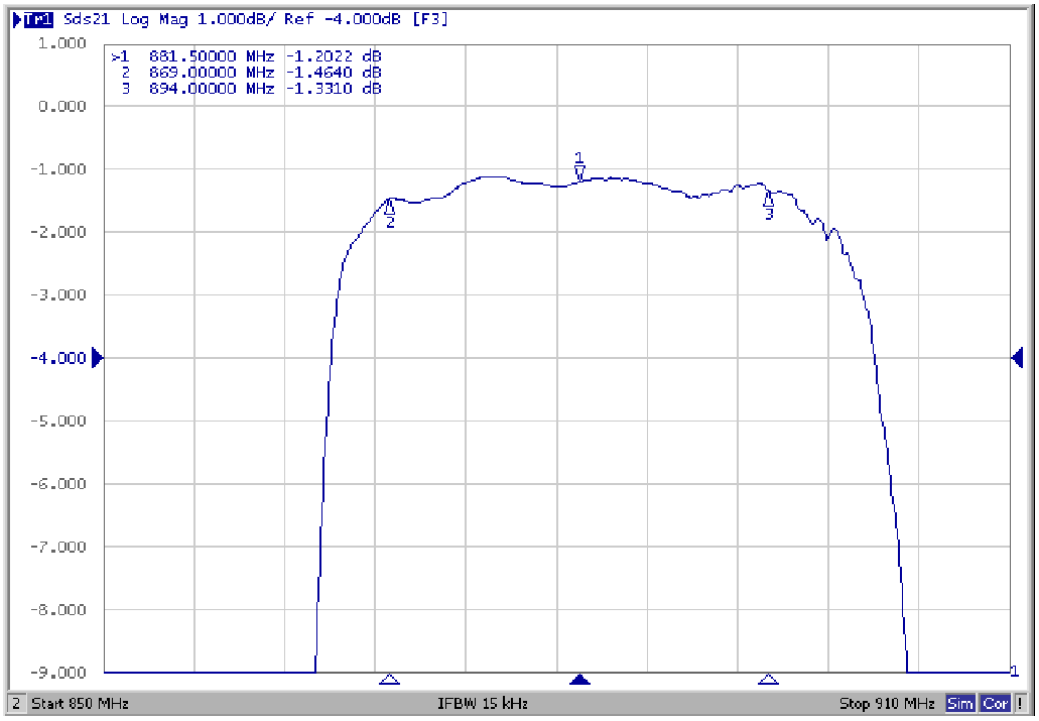




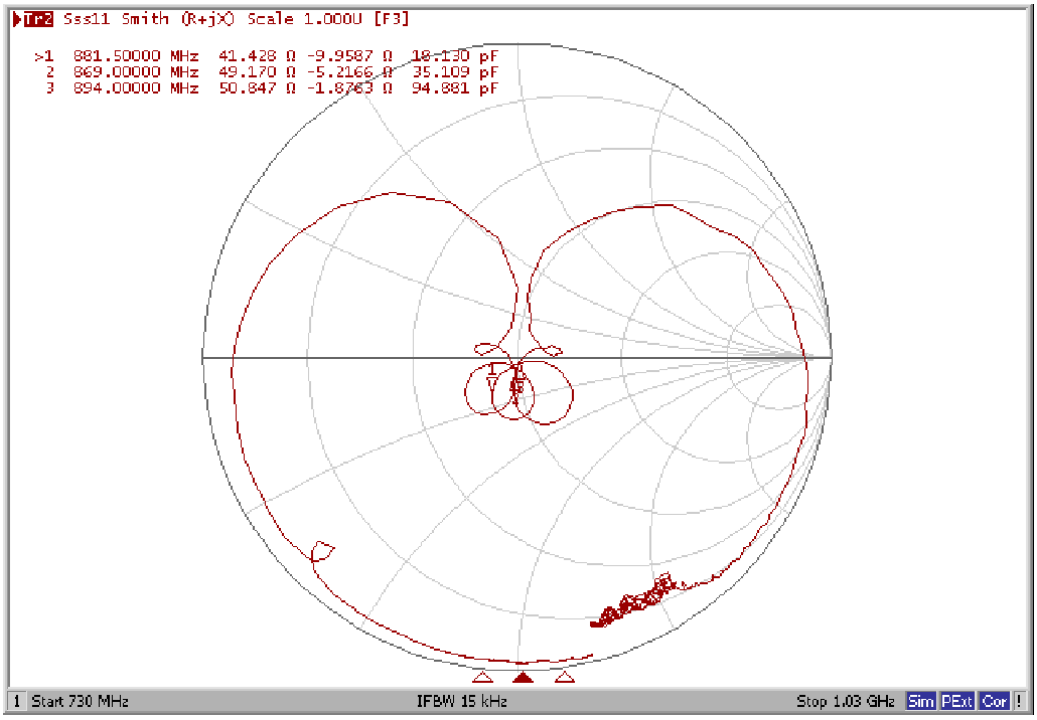
VSWR

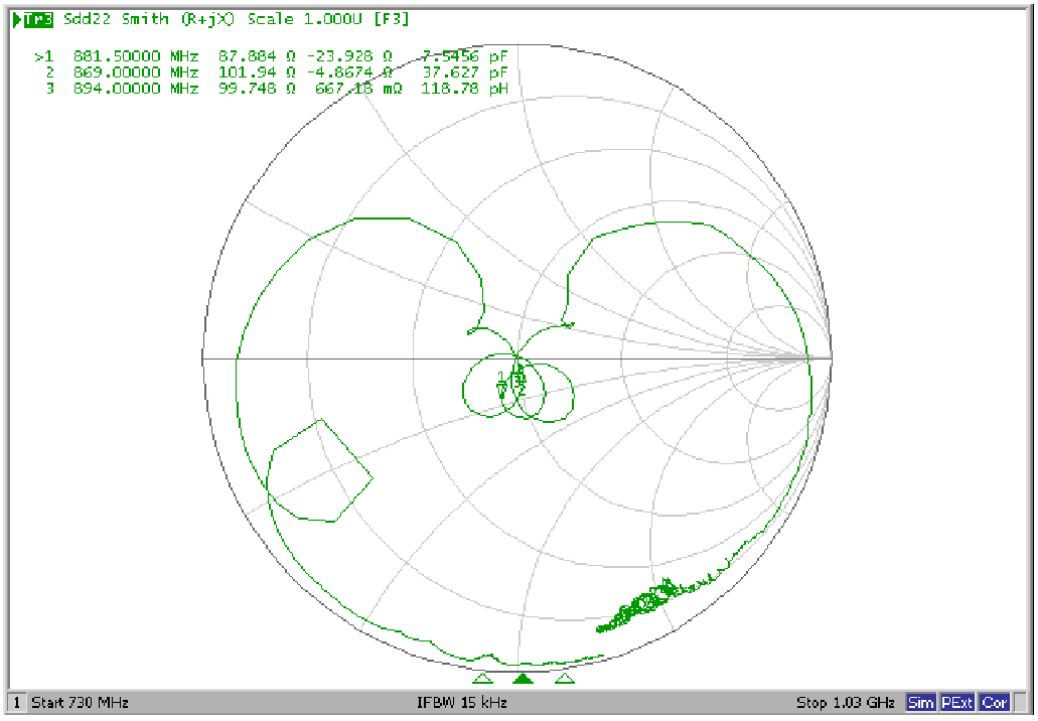

Tr1 Sss11 SWR 1.000/ Ref 1.000 [F3]
Tr2 Sdd22 SWR 1.000/ Ref 1.000 [F3]
>1 881.50000 MHz 1.3332
2 869.00000 MHz 1.1113
3 894.00000 MHz 1.0406
1 881.50000 MHz 1.3315
2 869.00000 MHz 1.0499
3 894.00000 MHz 1.0095
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
2 Start 850 MHz
IFBW 15 kHz
Stop 910 MHz
Sim
Cor

Ripple

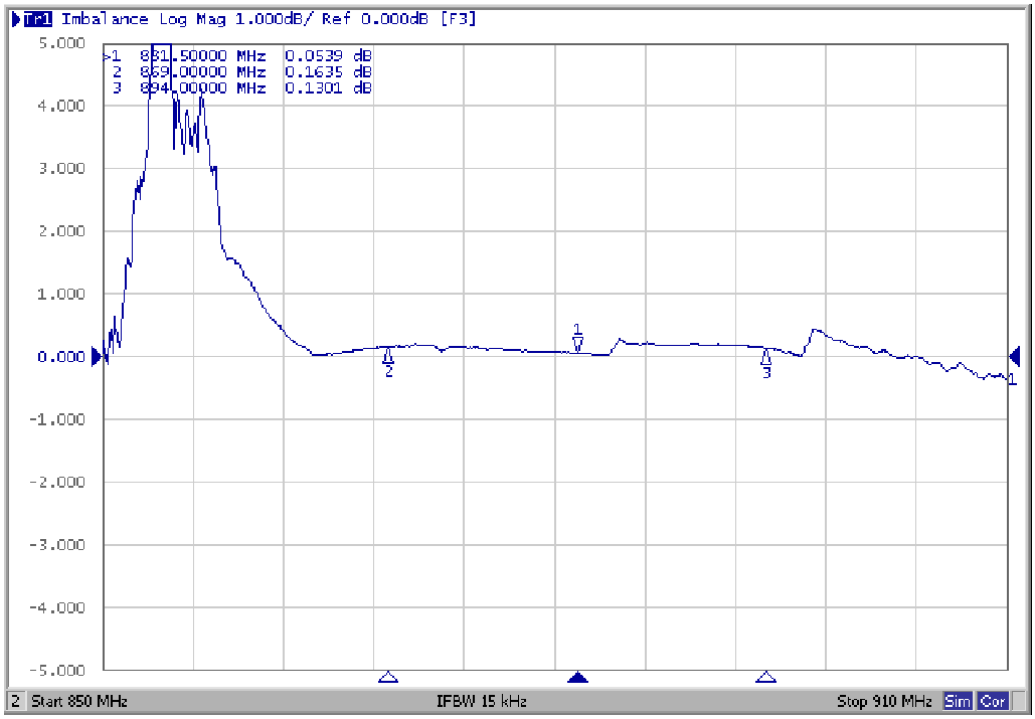

Tr1 Sds21 Log Mag 1.000dB/ Ref -4.000dB [F3]
>1 881.50000 MHz -1.2022 dB
2 869.00000 MHz -1.4640 dB
3 894.00000 MHz -1.3310 dB
1.000
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
-6.000
-7.000
-8.000
-9.000
2 Start 850 MHz
IFBW 15 kHz
Stop 910 MHz
Sim
Cor

Smith Chart

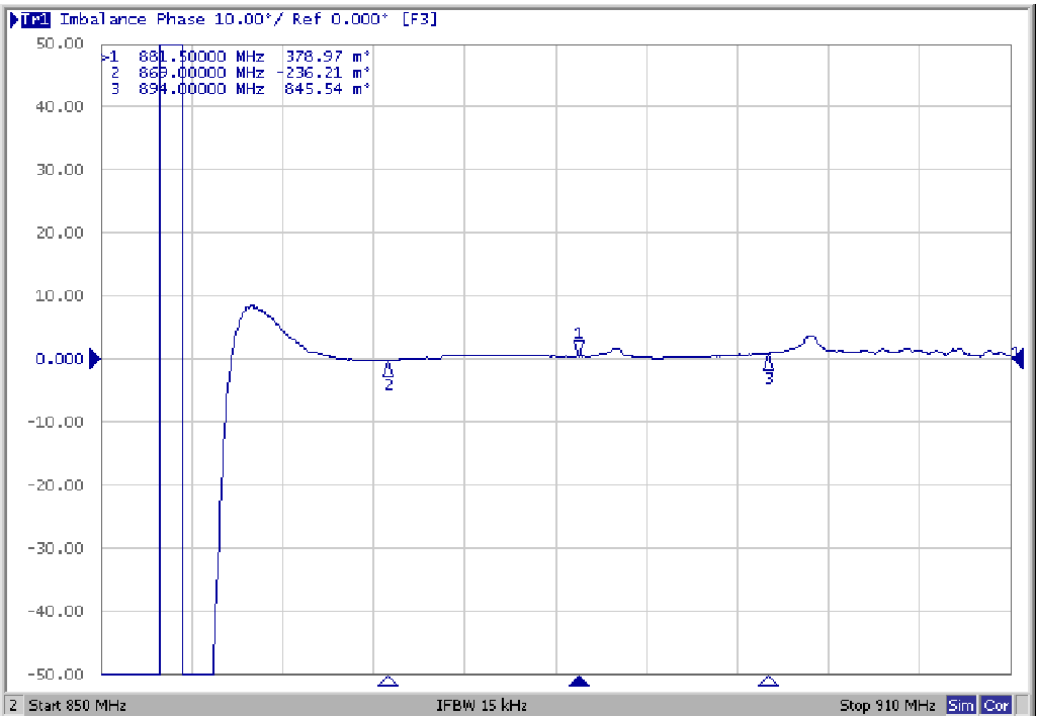

Tr2 Sss11 Smith (R+jX) Scale 1.000U [F3]
>1 881.50000 MHz 41.428 Ω -9.9587 Ω 18.130 pF
2 869.00000 MHz 49.170 Ω -5.2166 Ω 35.109 pF
3 894.00000 MHz 50.847 Ω -1.8763 Ω 94.881 pF
1 Start 730 MHz
IFBW 15 kHz
Stop 1.03 GHz
Sim PExt Cor


Tr3 Sdd22 Smith (R+jX) Scale 1.000U [F3]
>1 881.50000 MHz 87.884 Ω -23.928 Ω 7.5456 pF
2 869.00000 MHz 101.94 Ω -4.8674 Ω 37.627 pF
3 894.00000 MHz 99.748 Ω 667.18 mΩ 118.78 pH
1 Start 730 MHz
IFBW 15 kHz
Stop 1.03 GHz
Sim PExt Cor

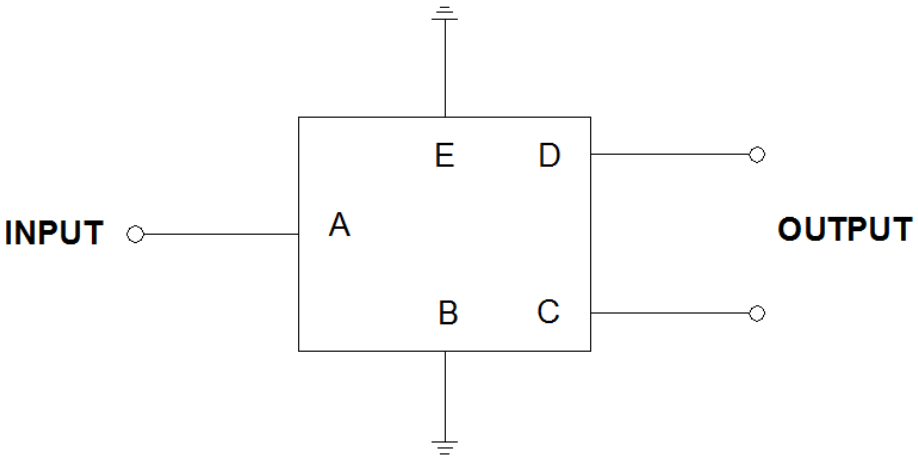
Amplitude balance



Phase balance



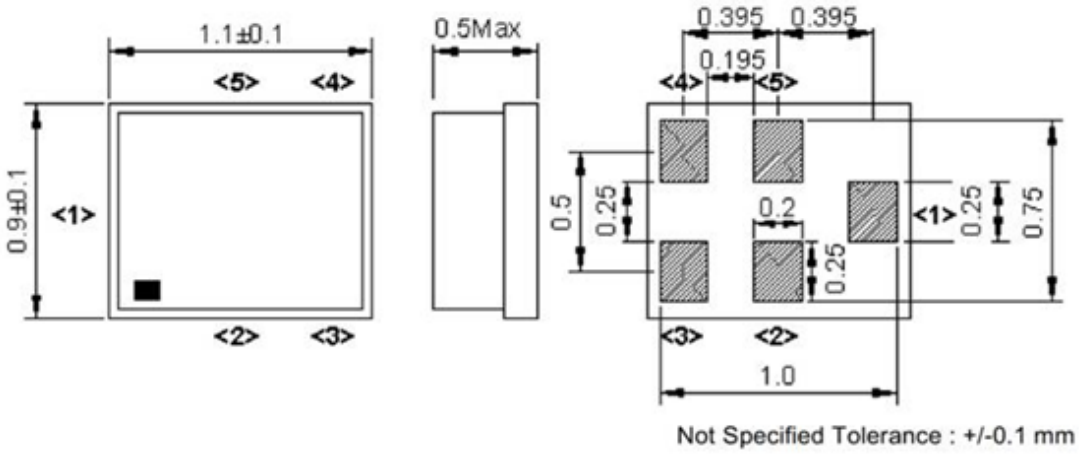
MEASUREMENT CIRCUIT:



Source Impedance: 50 Ω

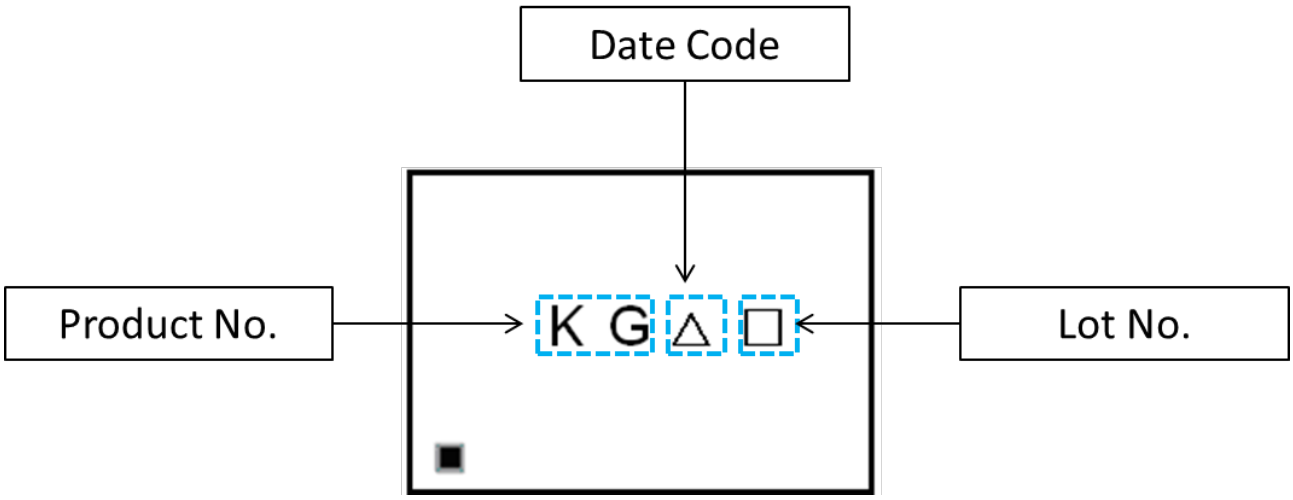
Load Impedance: 100 Ω

OUTLINE DRAWING:

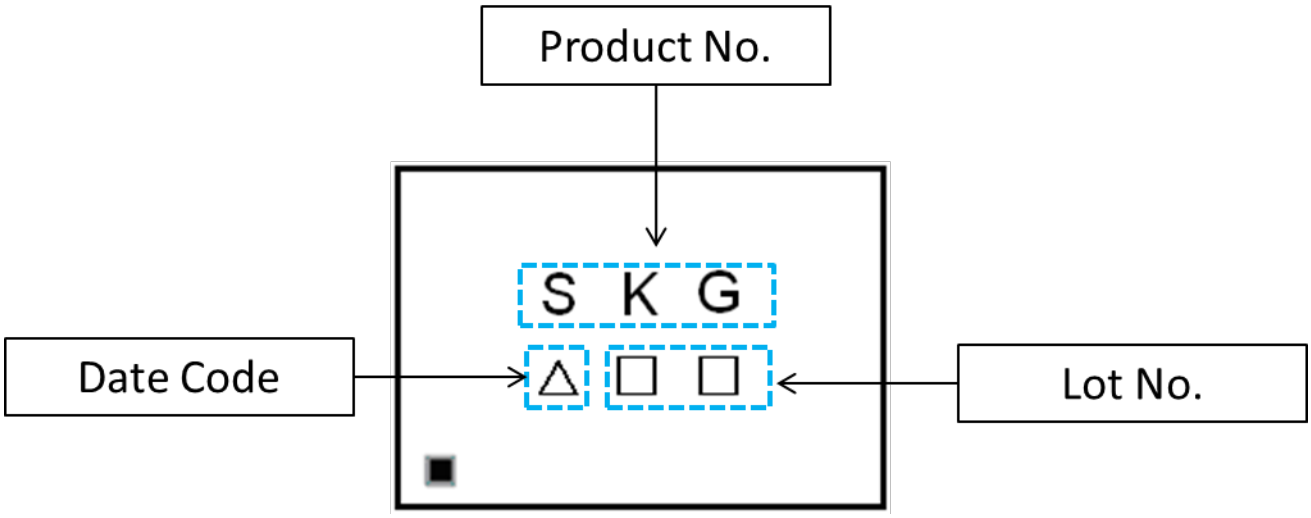


Pin Description	
B, E	Ground
A	Input
C,D	Balanced Output

Top View (Sample Run)



Top View (Pilot Run):



△ : Date Code

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

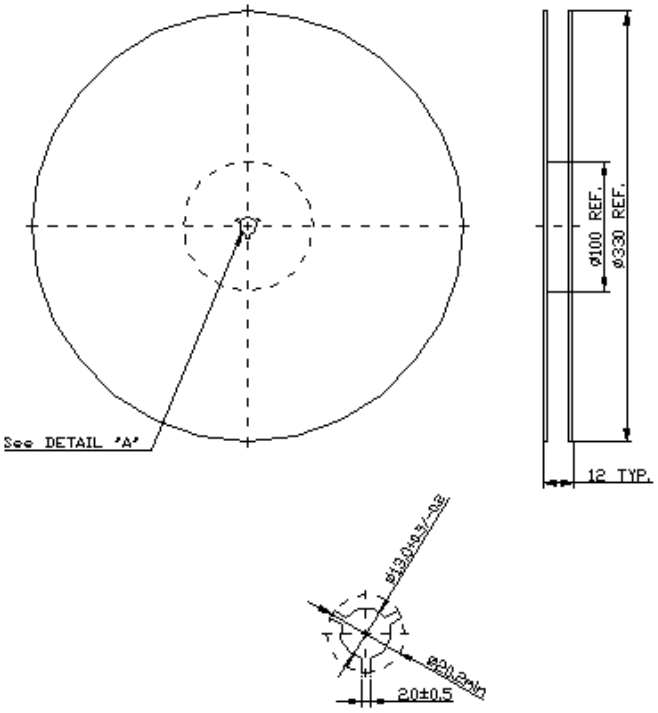
Product date Code (EIAJ)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V̄	W	X	Y	Z

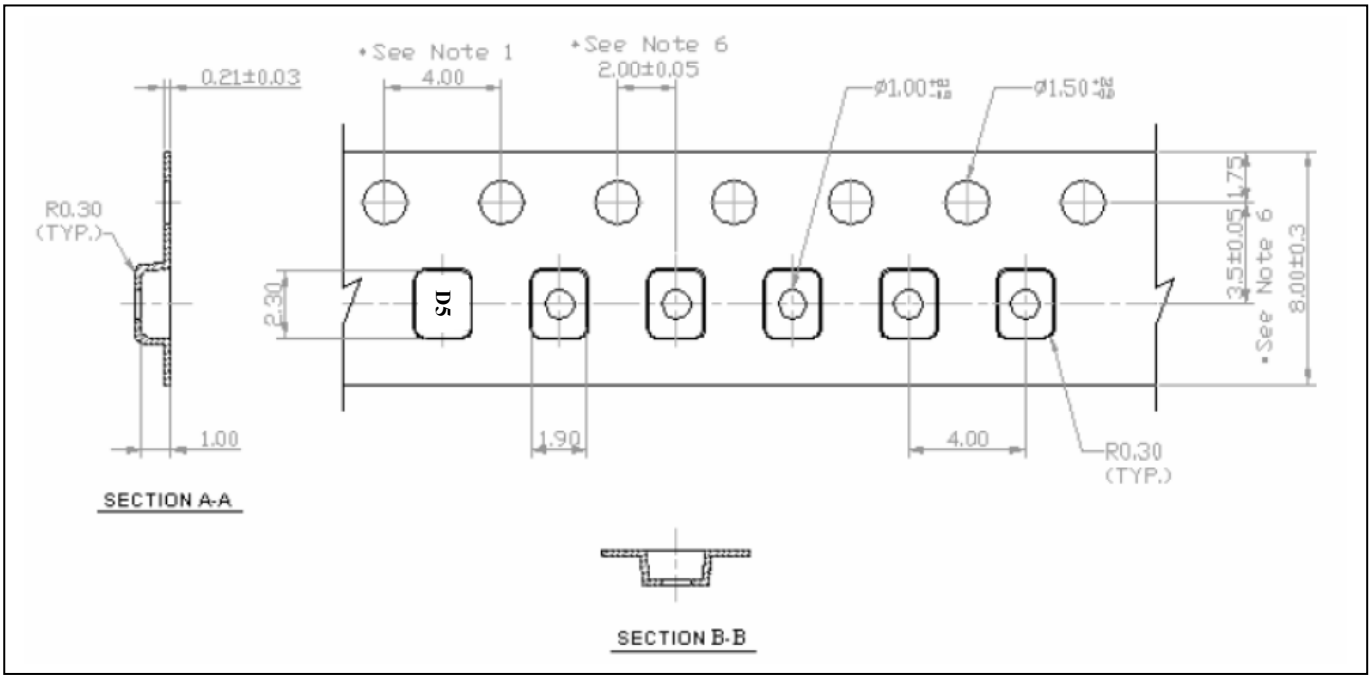
PACKING

REEL DIMENSION

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



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.