

# SAW Resonator 857.65 MHz

MODEL NO.: TC0446A

REV. NO.: 3.0

## A. FEATURES:

- 1-Port Resonator.

RoHS Compliant  
Lead free  
Lead-free soldering

## B. MAXIMUM RATING:

1. Input Power Level: 0 dBm
2. DC voltage: 3 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitive Level (MSL): Level 1

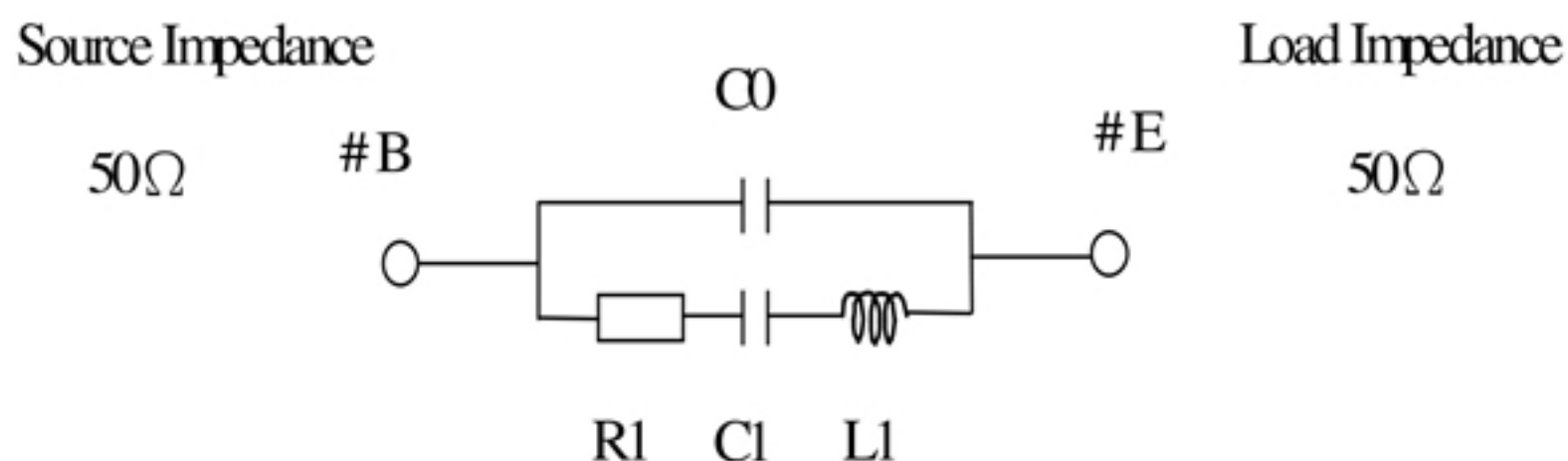
Electrostatic Sensitive Device (ESD)

## C. ELECTRICAL CHARACTERISTICS:

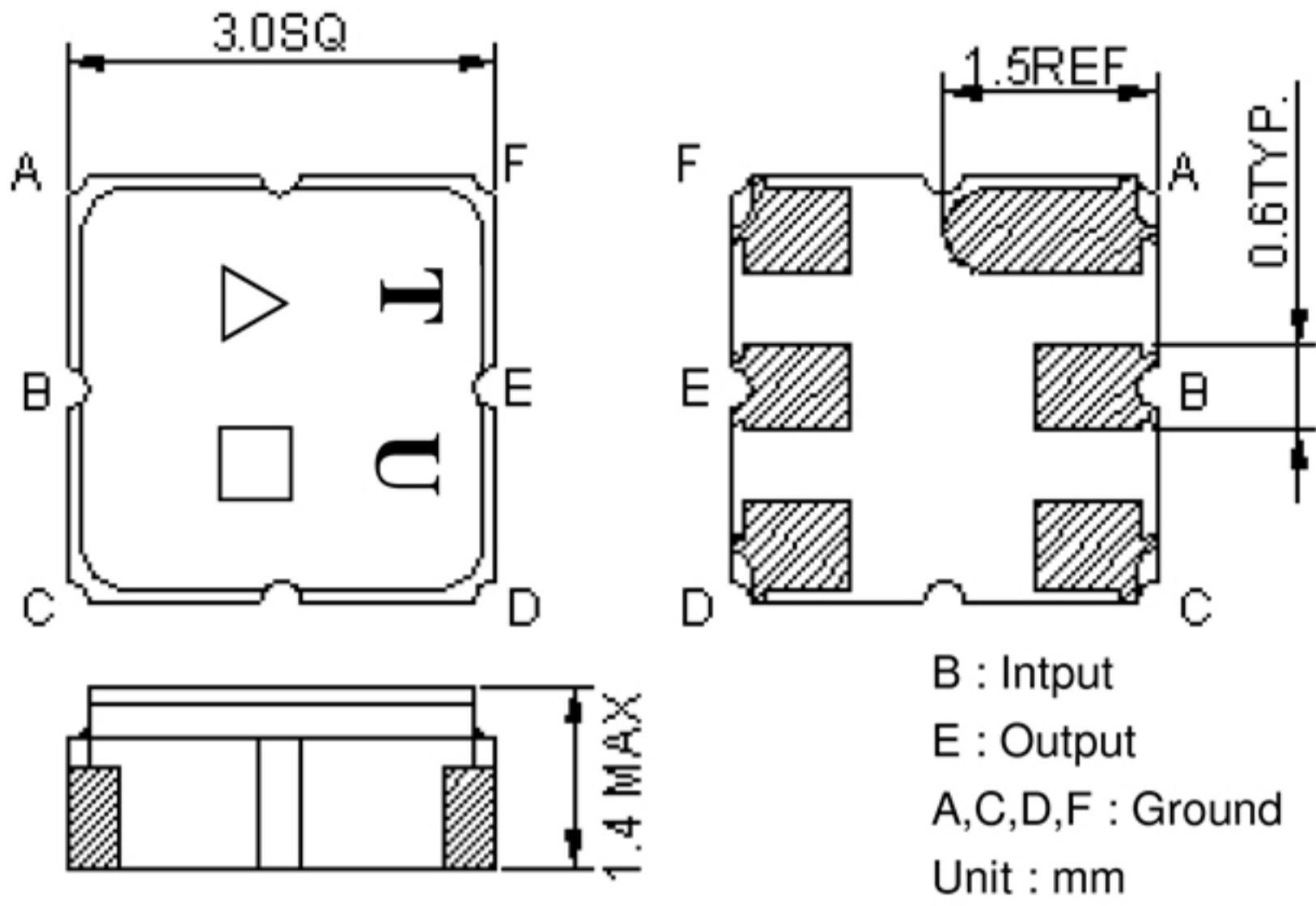
Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	857.600	857.650	857.700
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.4	2.2
Equivalent Elements				
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.18	-
Motional inductance <b>L1</b>	<b>μH</b>	-	29.14	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	16.24	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	2.47	-
Temp.coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover To	<b>deg.C</b>	-	25	-
Package size		SMD 3.0X3.0X1.4mm		

## D. EQUIVRENT CIRCUIT:

One-Port Resonator:



**E.OUTLINE DRAWING:**



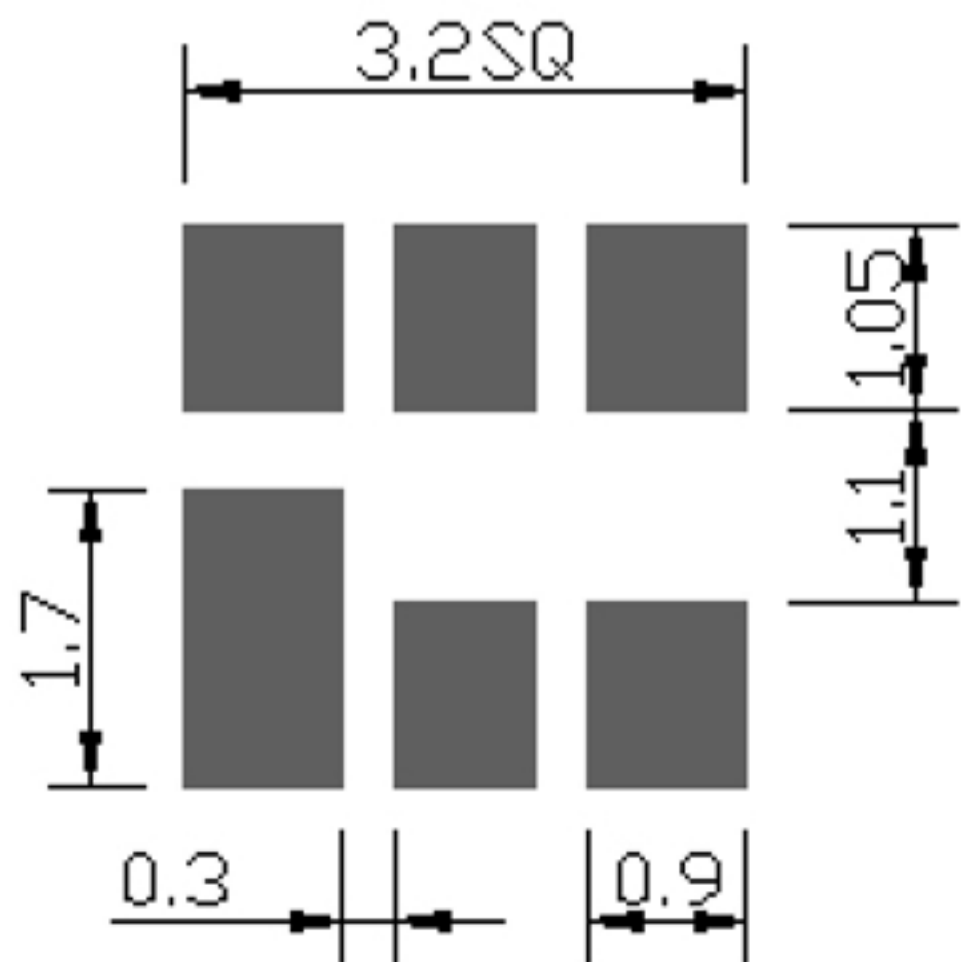
$\triangle$  : Year Code (2011->1, 2012->2, ..., 2019->9)

$\square$  : Date Code (Follow the table from planner each year)

Date Code Table

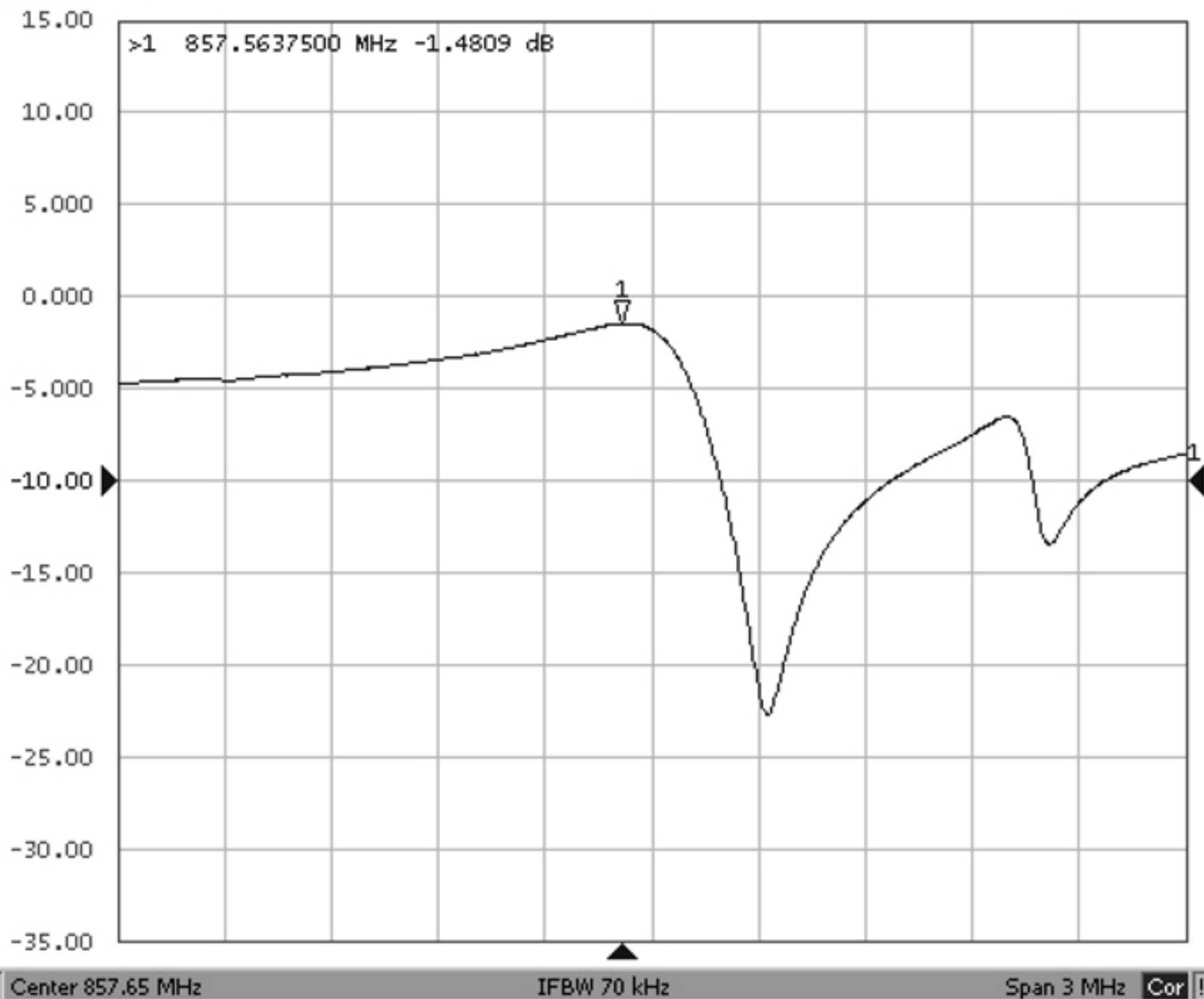
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

**LAND PATTERN:**

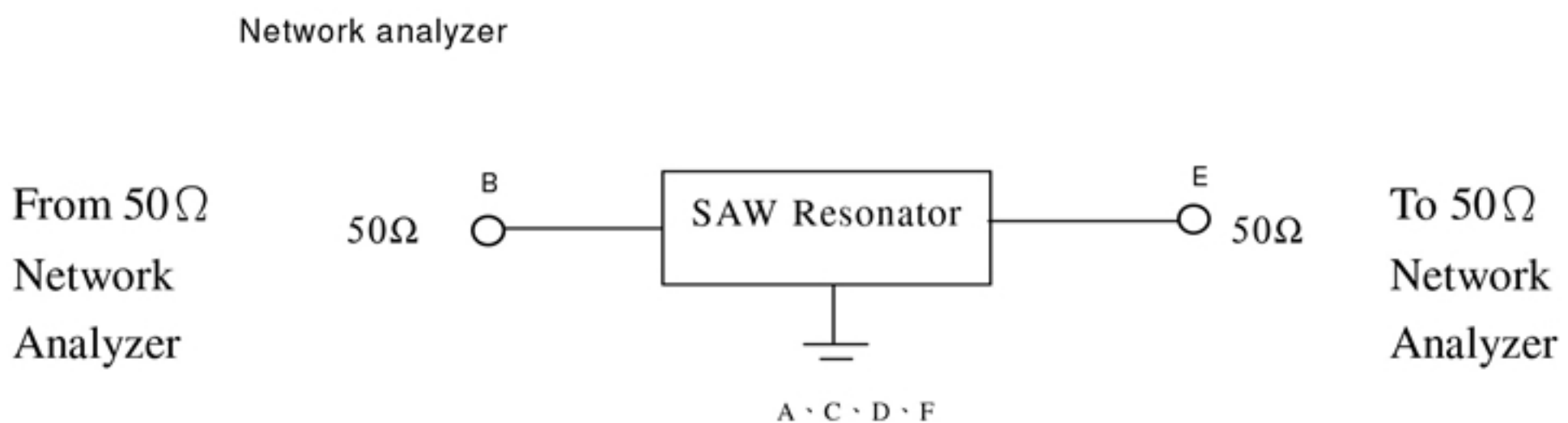


## F. FREQUENCY CHARACTERISTICS:

▶ **S21** Log Mag 5.000dB/ Ref -10.00dB [RT]



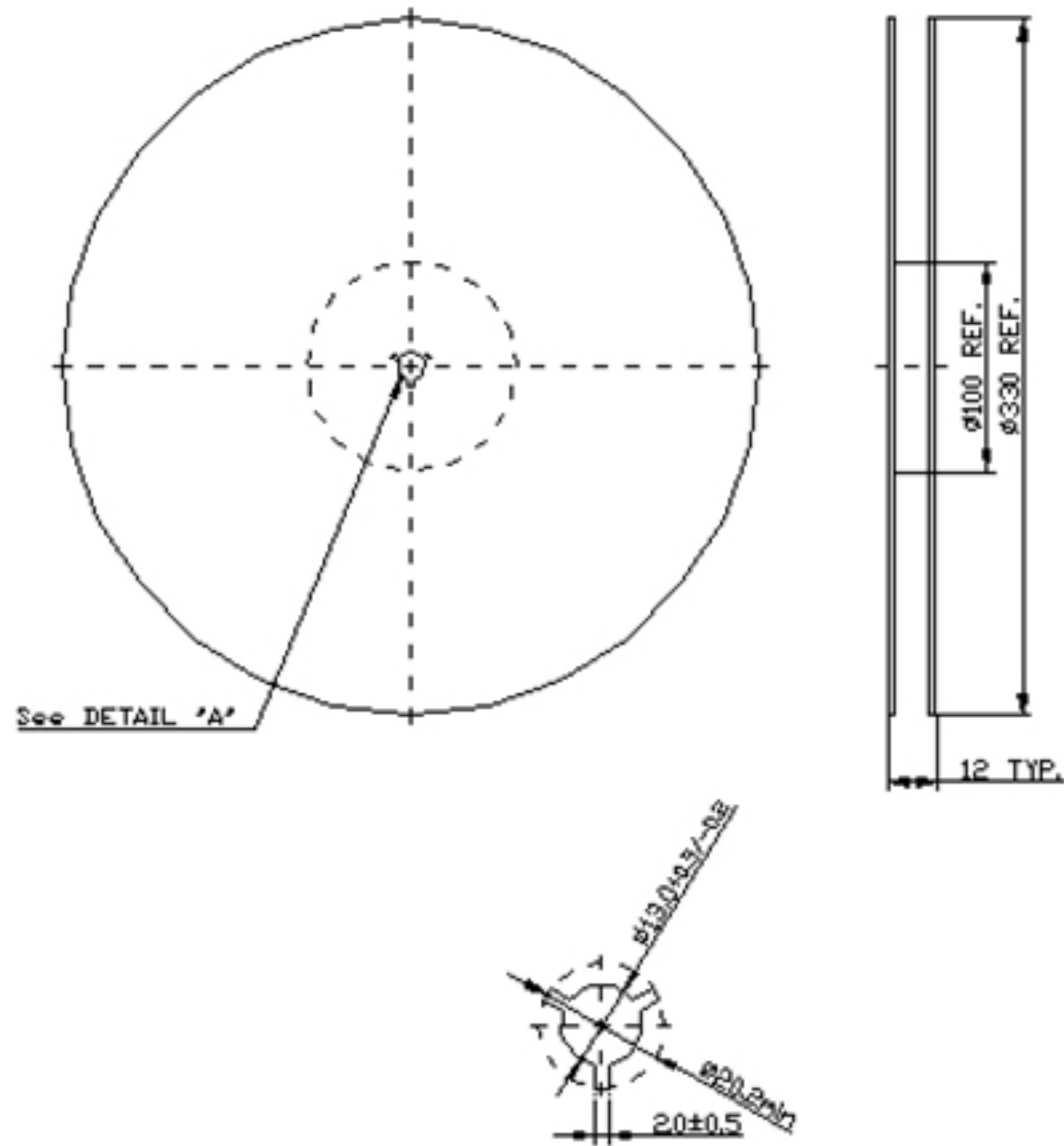
## G. TEST CIRCUIT:



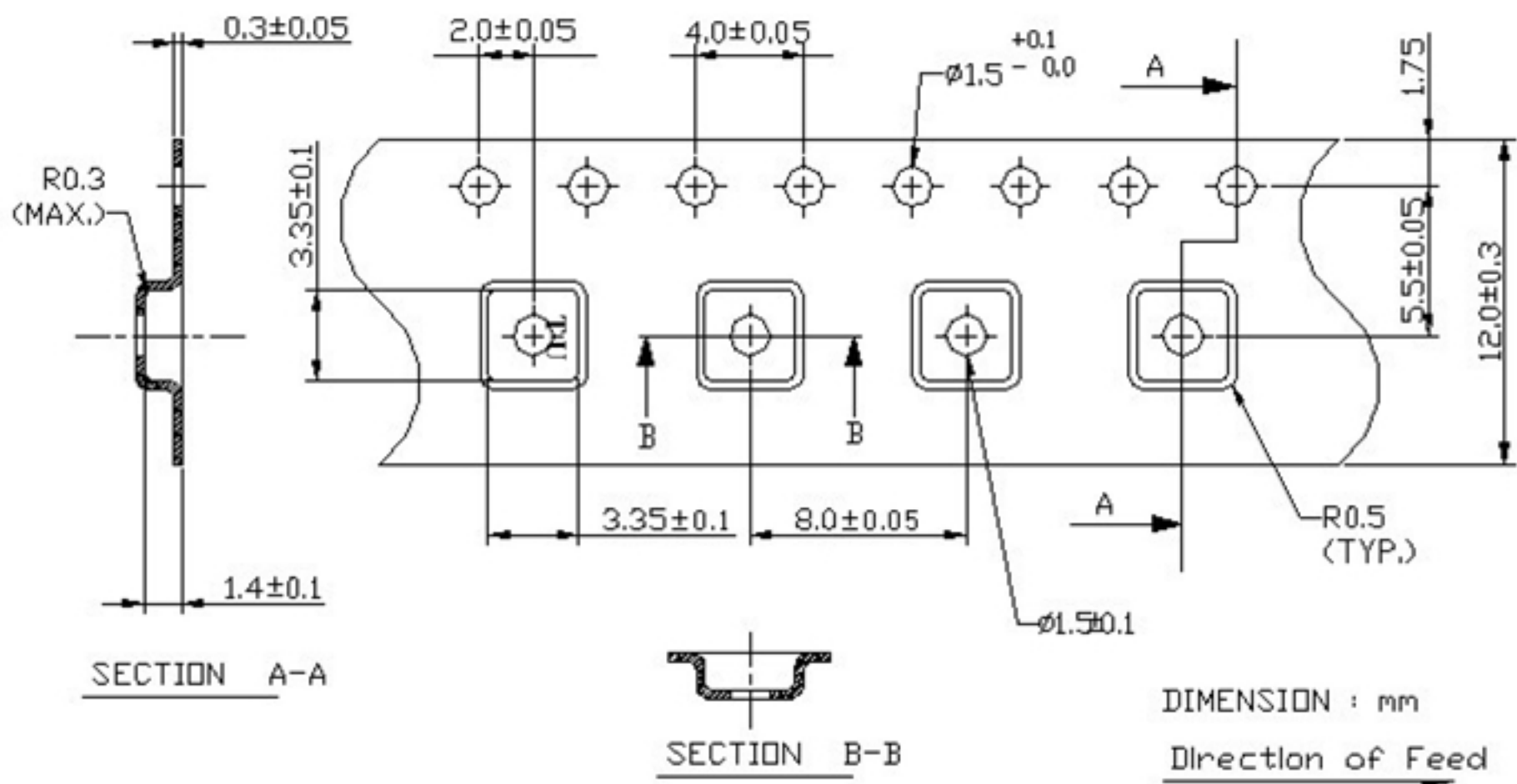
## H. PACKING:

### 1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



### 2. TAPE DIMENSION



# I. 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.

