



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: SAW Filter 942.5 MHz Band 8 Rx SMD 1.1x0.9 mm (BW=35 MHz)

TST Part No.: TA1839A

Customer Part No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2015/07/10

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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SAW Filter 942.5 MHz Band 8 Rx SMD 1.1x0.9 mm (BW=35 MHz)

MODEL NO.: TA1839A

REV. NO.:1.0

A. MAXIMUM RATING:

Operating Temperature: -20 °C to +85 °C

RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

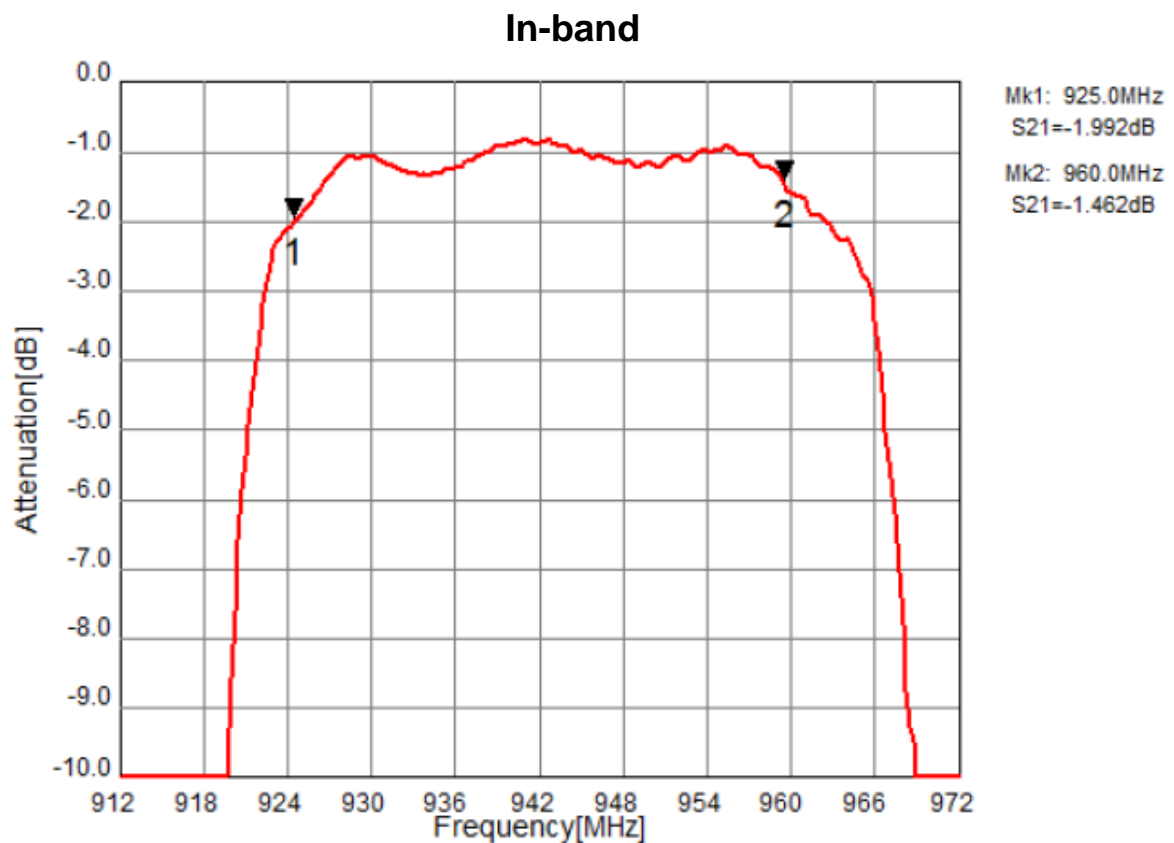
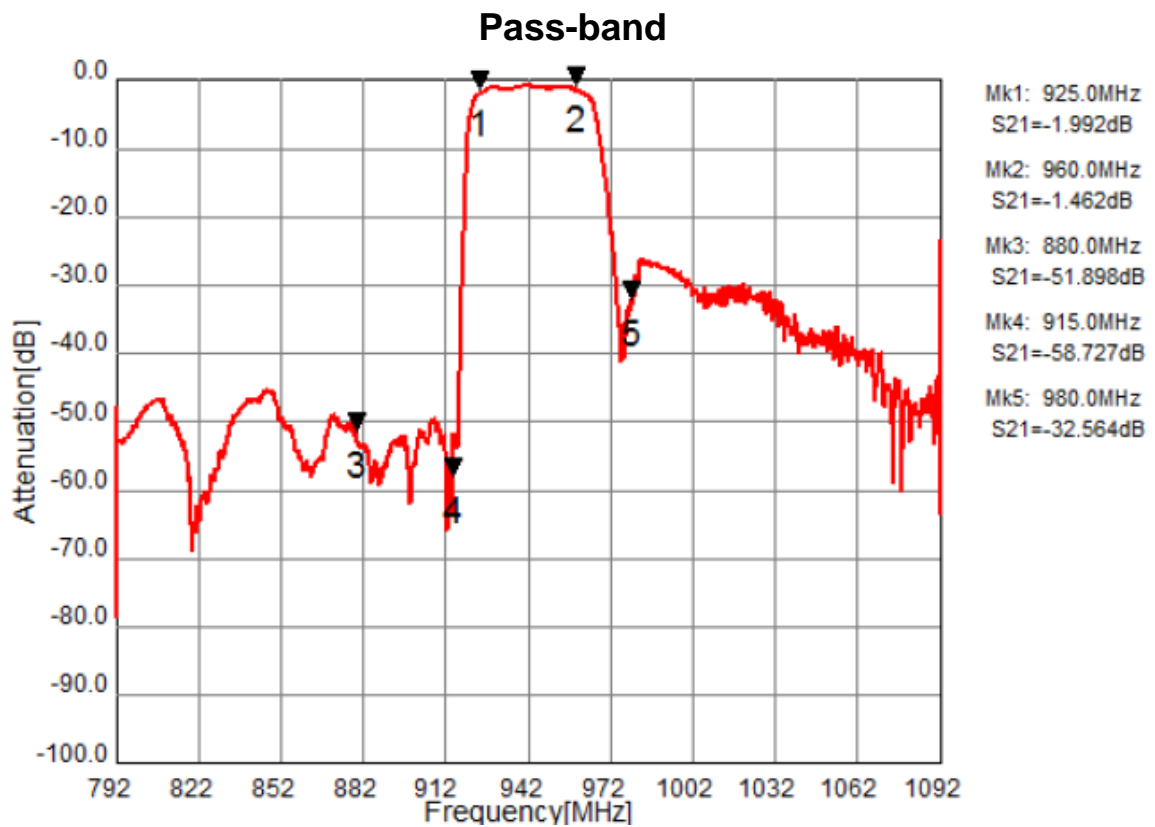
Terminating load impedance: $Z_L = 50 \Omega$ (Single-ended)

Electrostatic Sensitive Device (ESD)

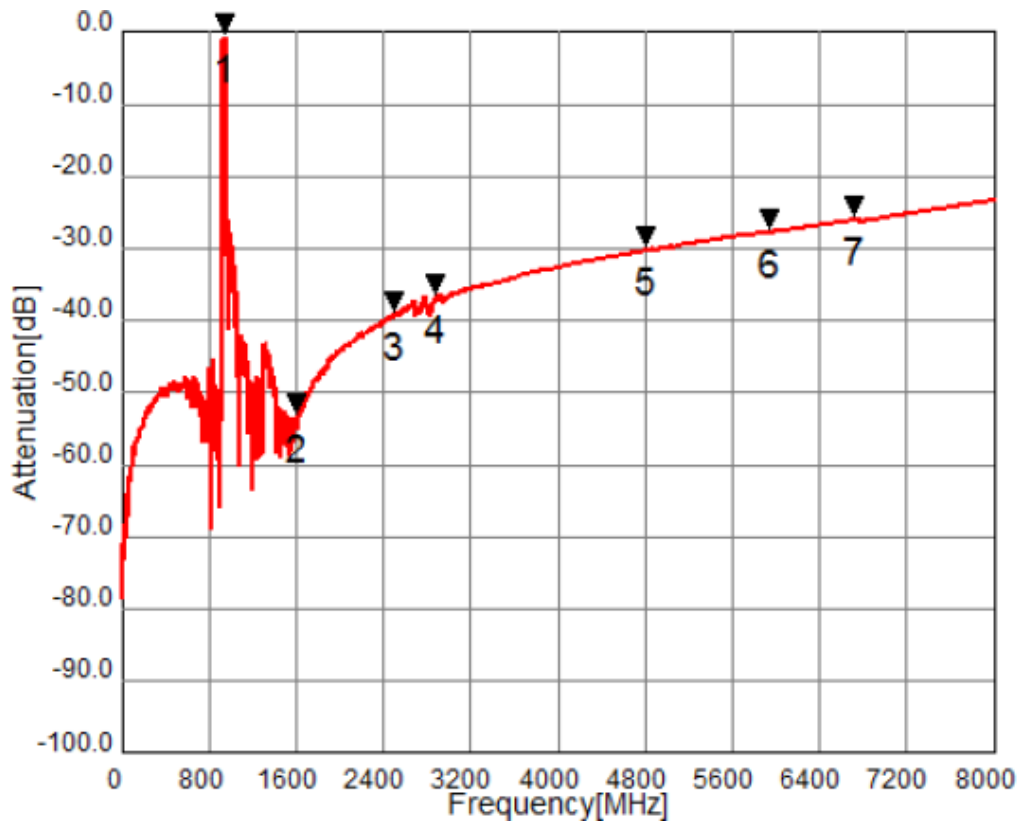
Parameters Description		Unit	Minimum	Typical	Maximum	
Center Frequency		MHz	-	942.5	-	
Insertion Loss(*1)	925~960 MHz	dB	-	2.0	3.0	
Amplitude Ripple	925~960 MHz	dB	-	1.3	2.3	
VSWR	Input	925~960 MHz	-	-	1.9	2.3
	Output	925~960 MHz	-	-	2.0	2.3
Attenuation:						
880~915 MHz		dB	46	48	-	
980~1558 MHz		dB	15	26	-	
1559~1607 MHz		dB	40	51	-	
1850~1920 MHz		dB	35	44	-	
2400`2500 MHz		dB	30	38	-	
2775~2880 MHz		dB	28	36	-	
3700~3840 MHz		dB	25	32	-	
4625~4800 MHz		dB	20	30	-	
4900~5950 MHz		dB	18	27	-	
5550~5725 MHz		dB	18	27	-	
6475~6720 MHz		dB	15	25	-	
7400~7680 MHz		dB	15	23	-	

(*1) Specification of insertion loss excludes loss that comes from the test board.

C. FREQUENCY CHARACTERISTICS:



Wide-band



Mk1: 942.5MHz
S21=-0.857dB

Mk2: 1607.0MHz
S21=-53.397dB

Mk3: 2500.0MHz
S21=-39.331dB

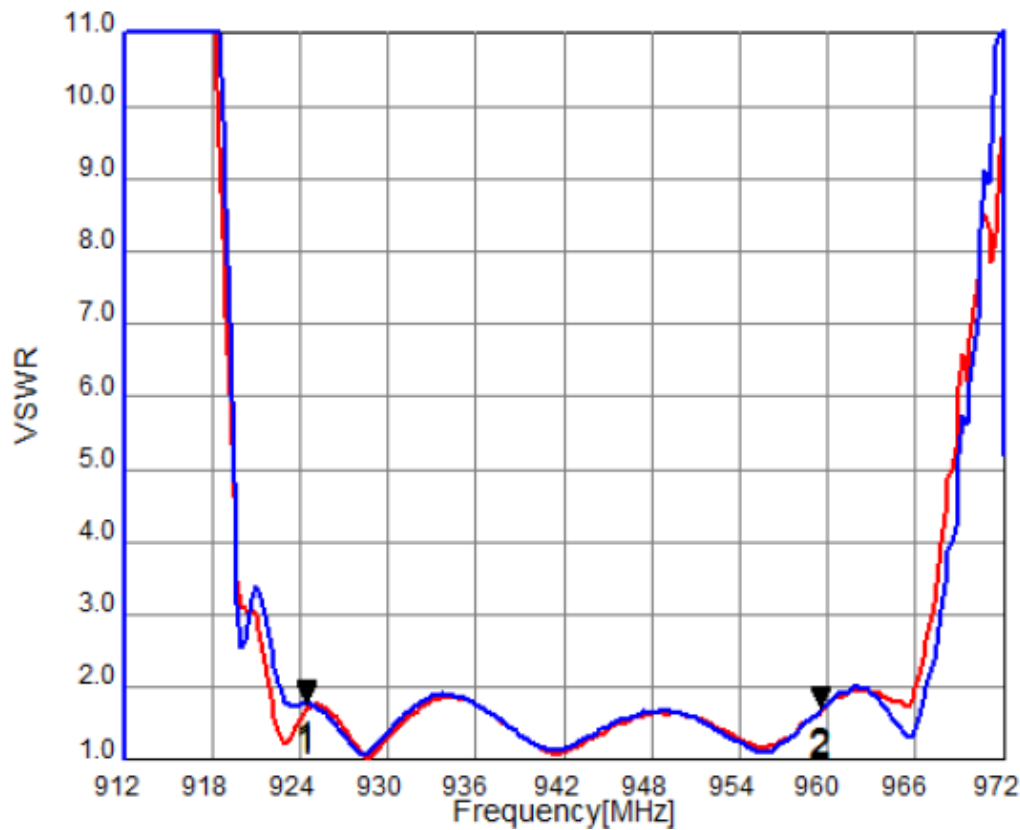
Mk4: 2880.0MHz
S21=-36.833dB

Mk5: 4800.0MHz
S21=-30.321dB

Mk6: 5950.0MHz
S21=-27.737dB

Mk7: 6720.0MHz
S21=-26.128dB

VSWR

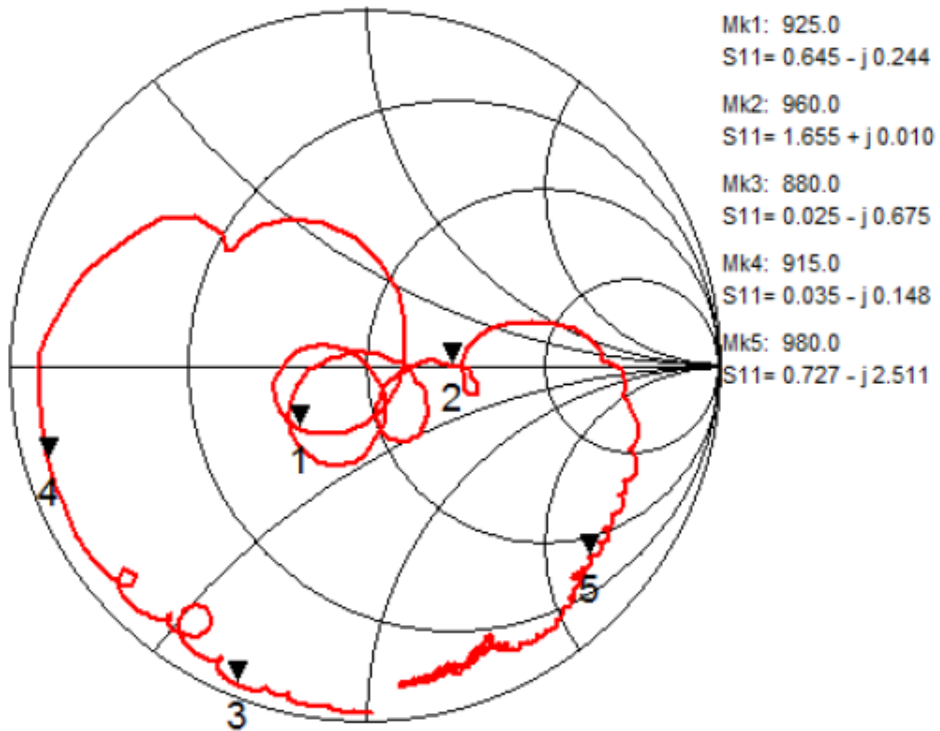


Mk1: 925.0MHz
VSWR1= 1.700
VSWR2= 1.768

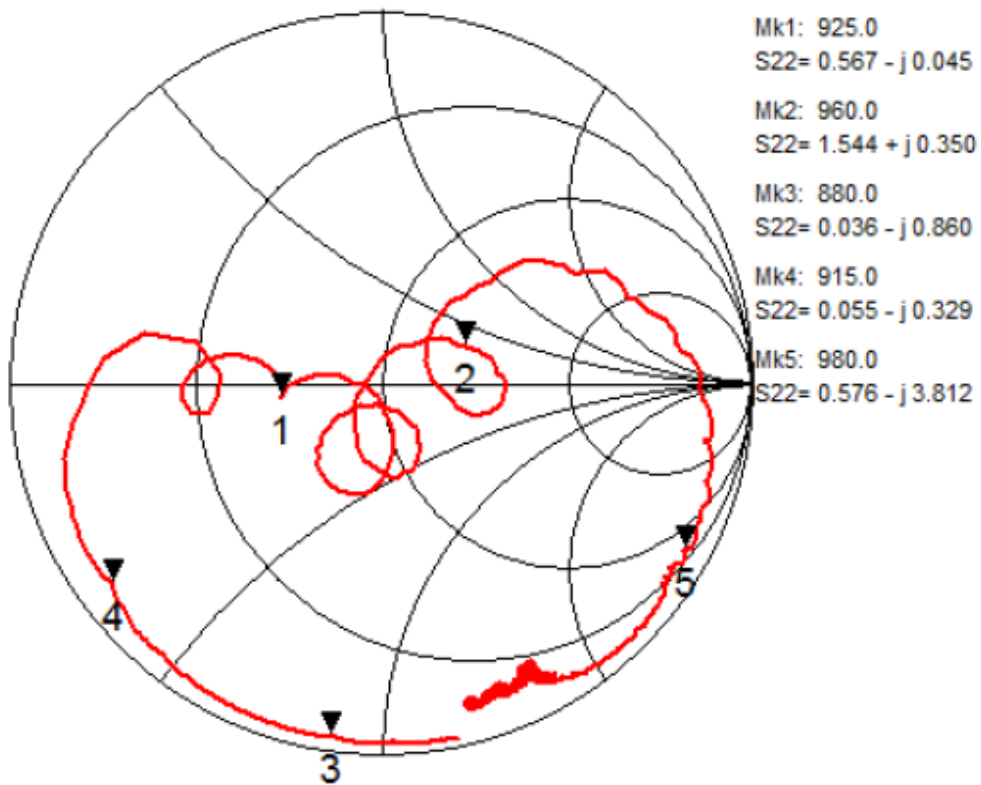
Mk2: 960.0MHz
VSWR1= 1.655
VSWR2= 1.674

— Input
— Output

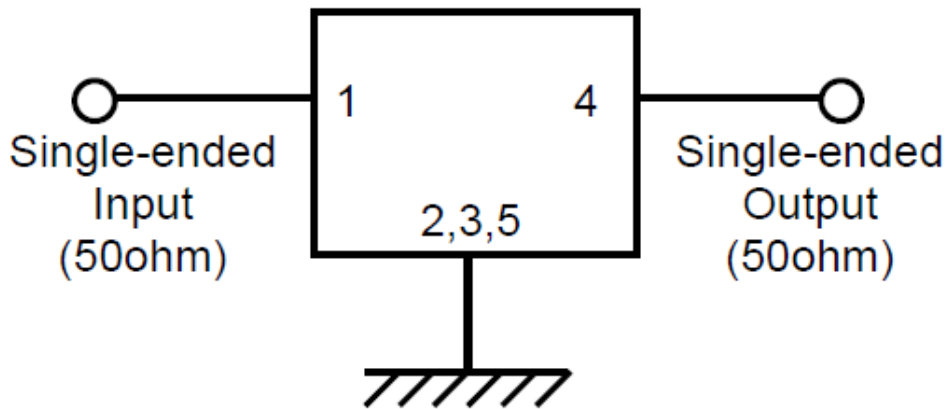
Input Impedance



Output Impedance

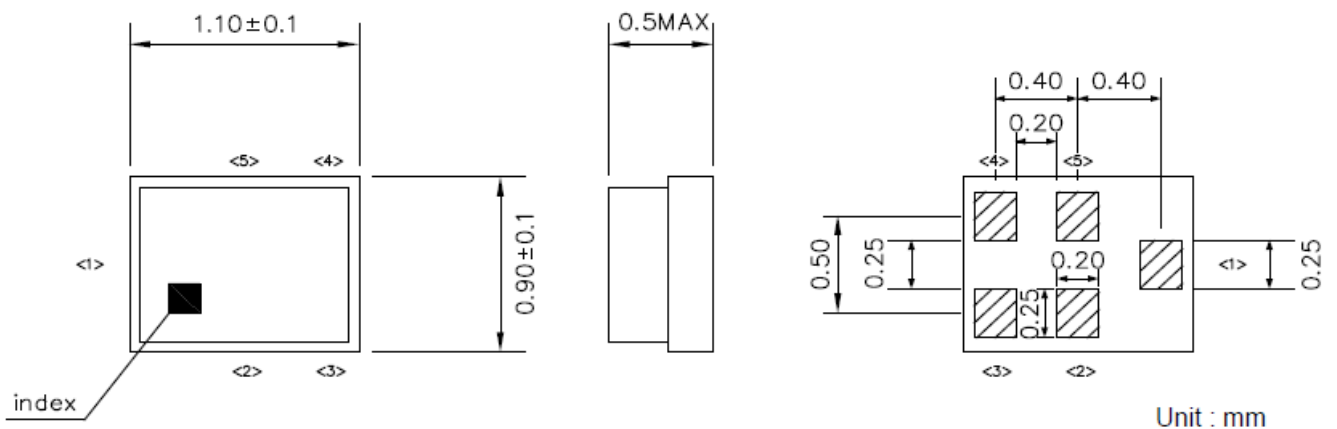


D. MEASUREMENT CIRCUIT:



E. OUTLINE DRAWING:

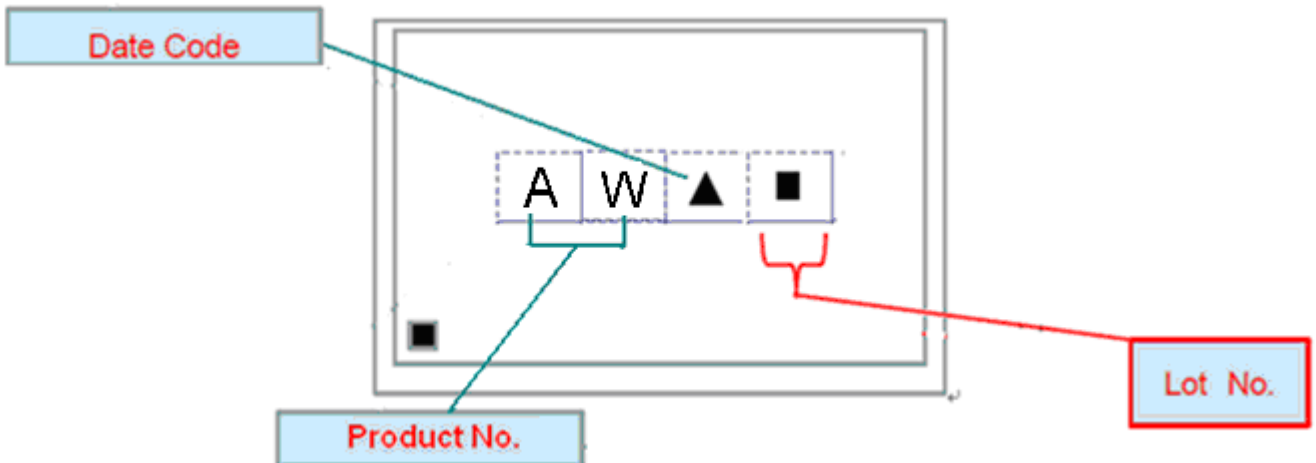
Device size: 1.1typ. x 0.9typ. x 0.5max



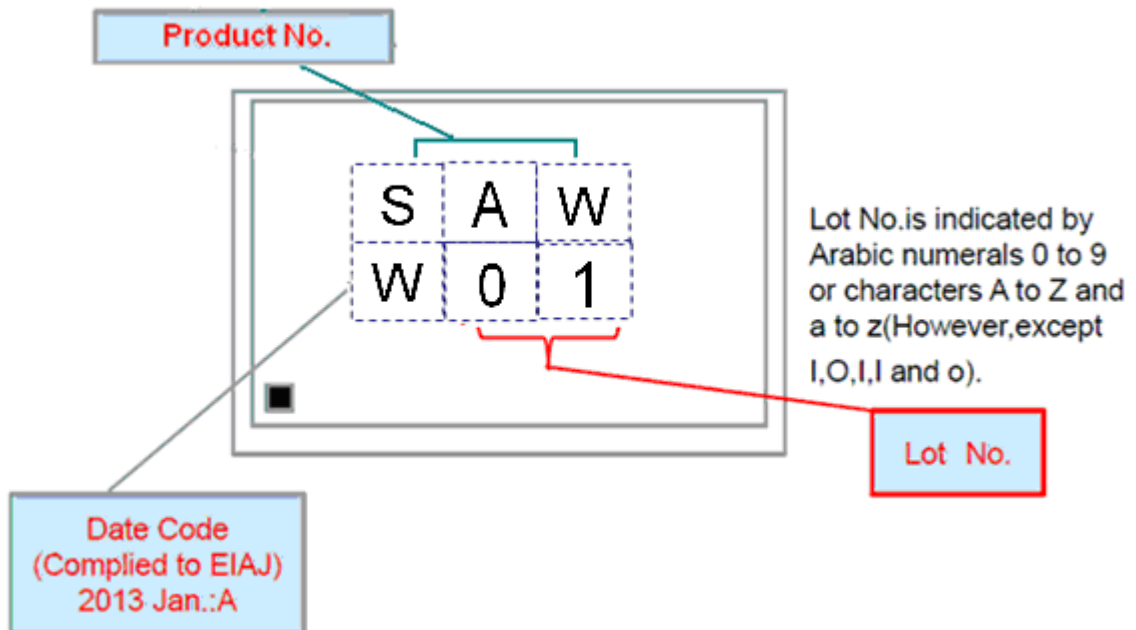
Pin Configuration

Pin No.	Symbol	Function
1	IN	Single-ended pin
2	GND	Ground
3	GND	Ground
4	OUT	Single-ended pin
5	GND	Ground

Top View (Sample Production):



Top View (Mass Production):

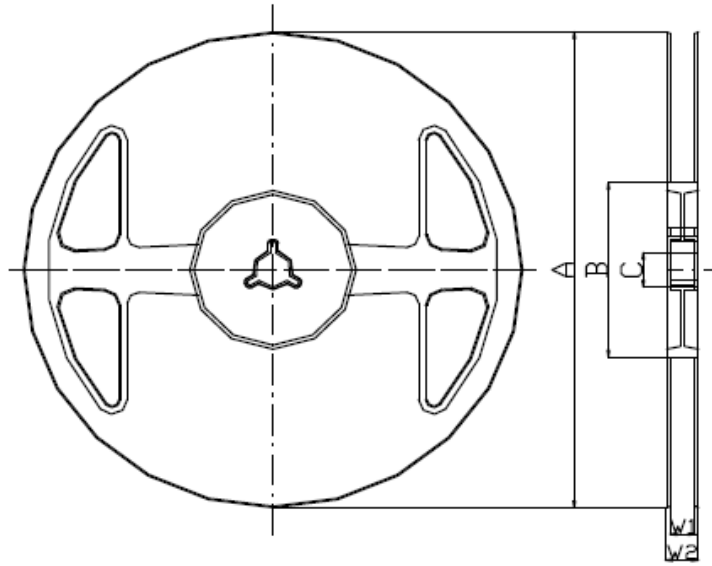


Product date Code (EIAJ)

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	V	W	X	Y	Z

F. PACKING:

1. REEL DIMENSION



Materials of Reel

Material : Polvstvrene + Carbon

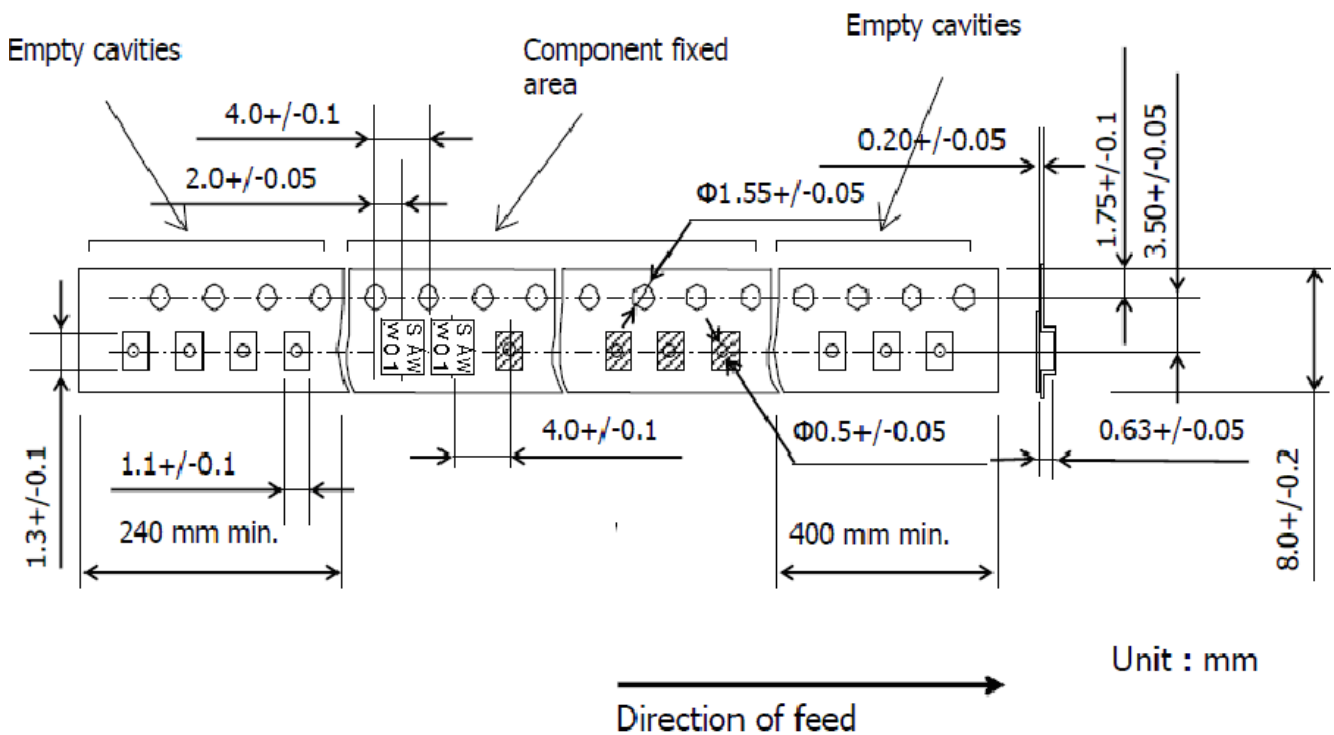
Color : Black

Surface resistance (reference value) : $10^9\Omega/\text{sq}$ Max.

Unit : mm

Code	Quantity	A	B	C	W1	W2
J	5,000 pcs	$\phi 180.0 +0.0/-1.5$	$\phi 66.0 +/-0.5$	$\phi 13.0 +/-0.2$	$9.0 +1.0/-0.0$	$11.4 +/-1.0$

2. TAPE DIMENSION



Unit : mm

G. RECOMMENDED TEMPERATURE PROFILE OF REFLOW SOLDERING:

The figure below shows the recommended temperature profile for reflow soldering in the case of lead-free solder alloy Sn3.0Ag0.5Cu.

Recommended number of reflow cycles is 5 maximum.

Suitable condition for solder heating is different depending on composition and manufacturing method. Please contact the solder manufacturer for details.

