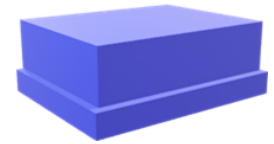


SF2545LM

**836.5 MHz
SAW Filter**



SM1109

MAXIMUM RATING

- Maximum Input Power: 13 dBm(in passband)
- Operating Temperature: -30 °C to +85 °C
- Storage Temperature: -40 °C to +100 °C
- ESD: 100 V(MM), 200 V(HBM)
- Moisture Sensitive Level: Level 1(MSL1)

ELECTRICAL CHARACTERISTICS

Terminating source impedance: $Z_s = 50 \Omega$

Terminating load impedance: $Z_L = 50 \Omega$

| Parameters Description | | Unit | Minimum | Typical | Maximum |
|------------------------|-------------|-------------------|---------|---------|---------|
| Center Frequency | | MHz | - | 836.5 | - |
| Insertion Loss | 824~849 MHz | dB | - | 1.9 | 2.3 |
| Amplitude ripple | 824~849 MHz | dB _{p-p} | - | 0.8 | 1.3 |
| VSWR(Input) | 824~849 MHz | - | - | 2.0 | 2.3 |
| VSWR(Output) | 824~849 MHz | - | - | 2.0 | 2.3 |
| Attenuation: | | | | | |
| DC~750 MHz | | dB | 35 | 41 | - |
| 750~800 MHz | | dB | 28 | 34 | - |
| 869~894 MHz | | dB | 40 | 45 | - |
| 894~1050 MHz | | dB | 38 | 42 | - |
| 1050~1210 MHz | | dB | 35 | 40 | - |
| 1210~1580 MHz | | dB | 30 | 35 | - |
| 1580~2000 MHz | | dB | 28 | 32 | - |
| 2000~3000 MHz | | dB | 23 | 27 | - |
| 3000~6000 MHz | | dB | 12 | 18 | - |

Notes: (1) No Matching Network.



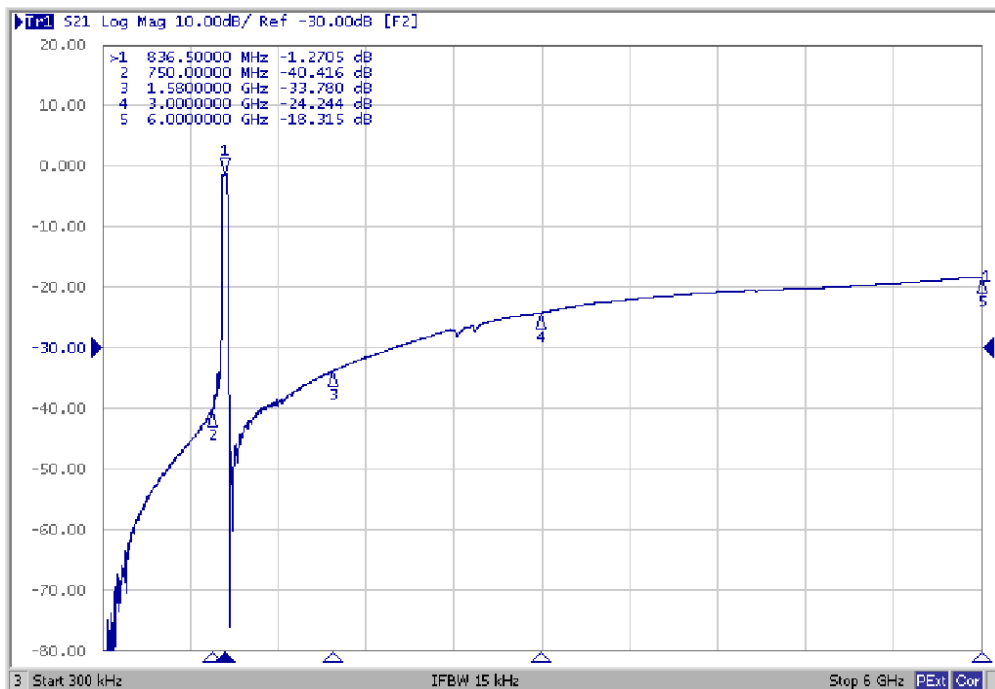
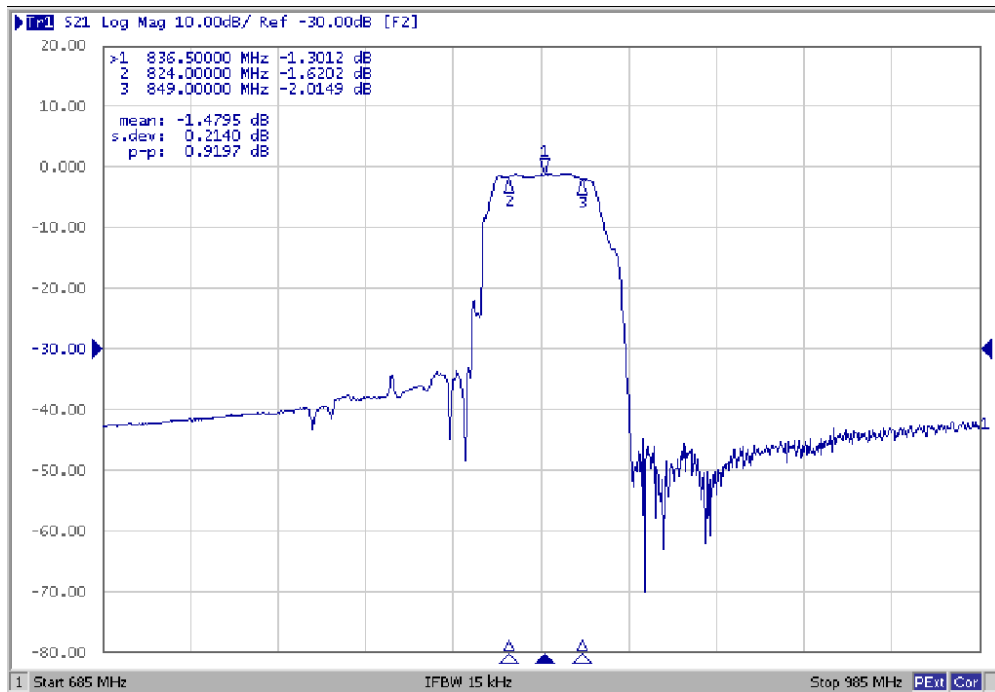
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

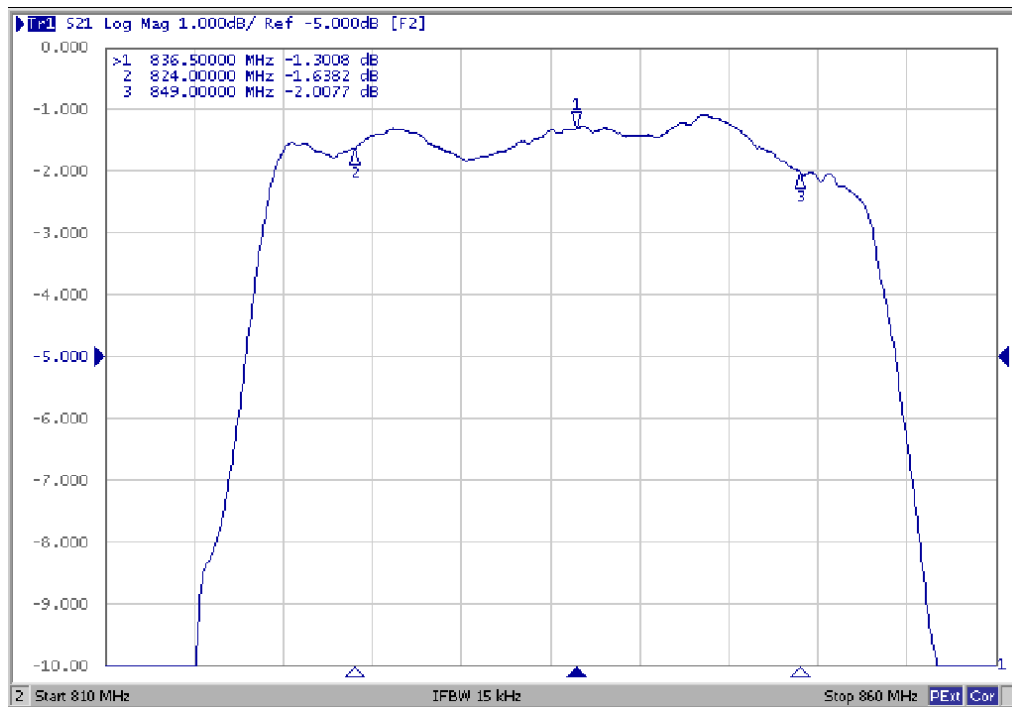
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

FREQUENCY CHARACTERISTIC:

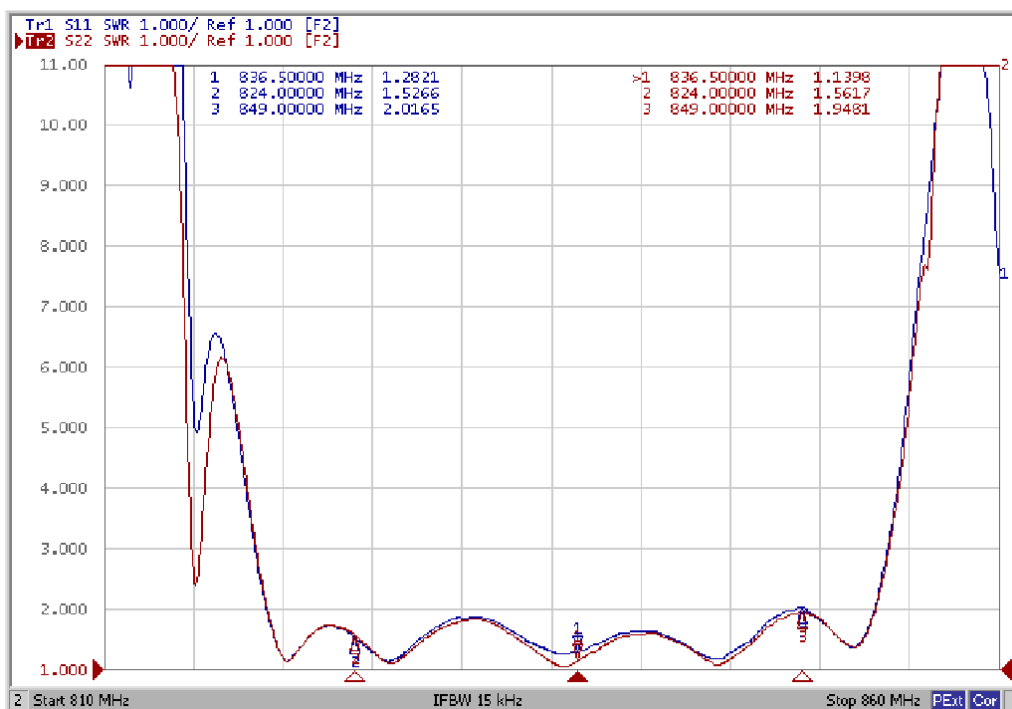
Frequency Response



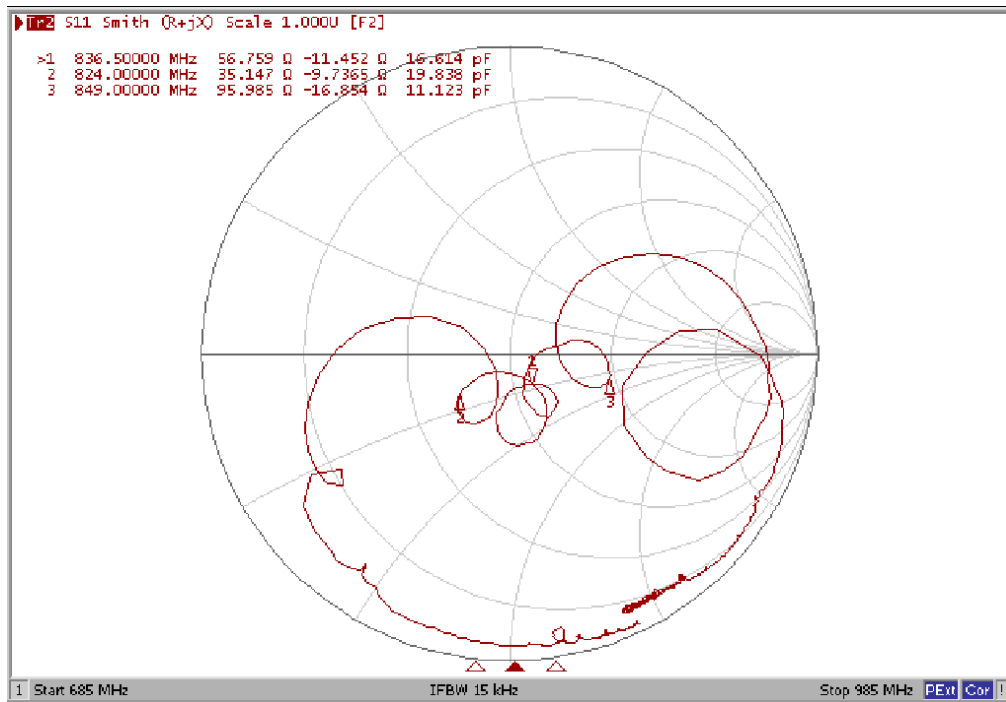
Ripple



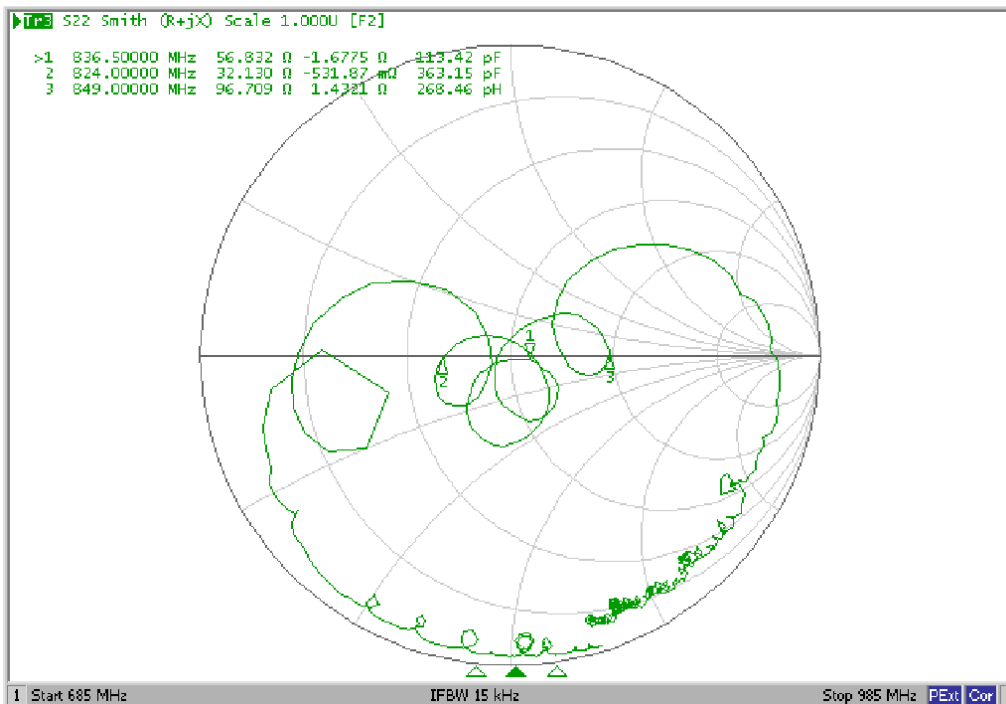
VSWR



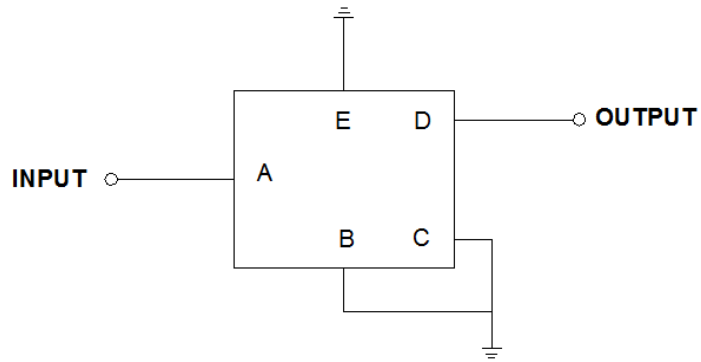
Smith Chart (S11)



Smith Chart (S22)

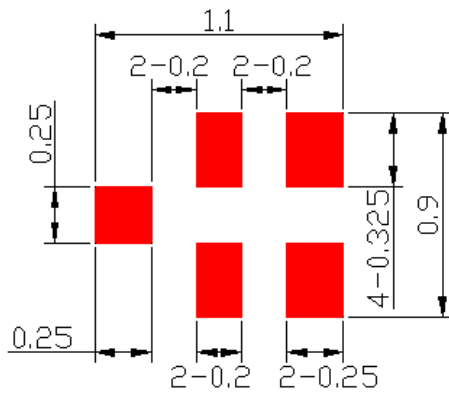



MEASUREMENT CIRCUIT:



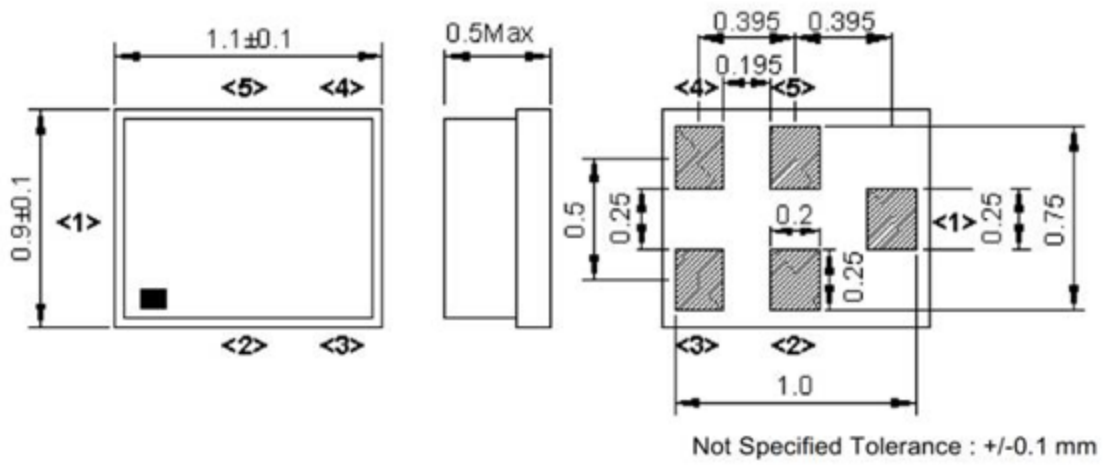
Source & Load Impedance: 50 Ω

PCB Footprint:



 : Land Pattern
Unit: mm

OUTLINE DRAWING:



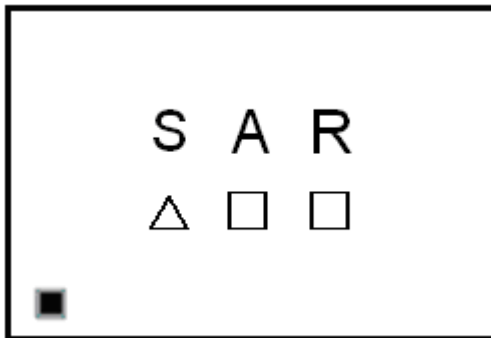
Pin Configuration

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

Top View (Sample Production):



Top View (Mass Production):



Δ : Date Code

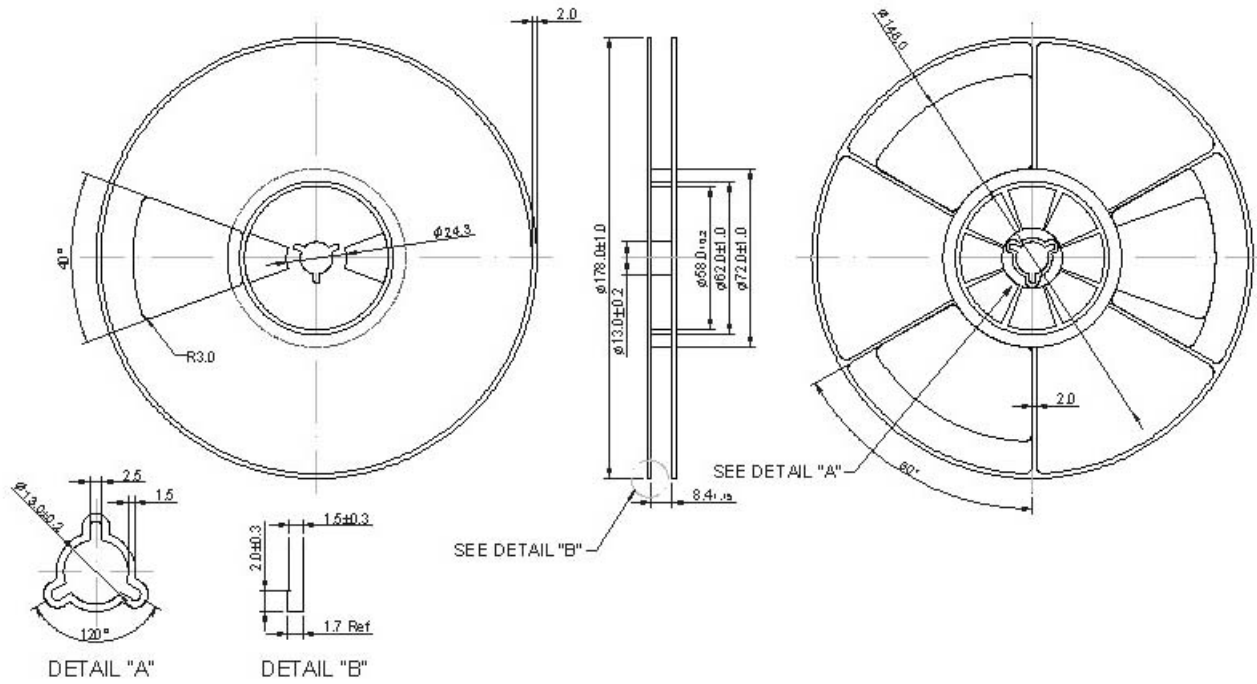
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code:

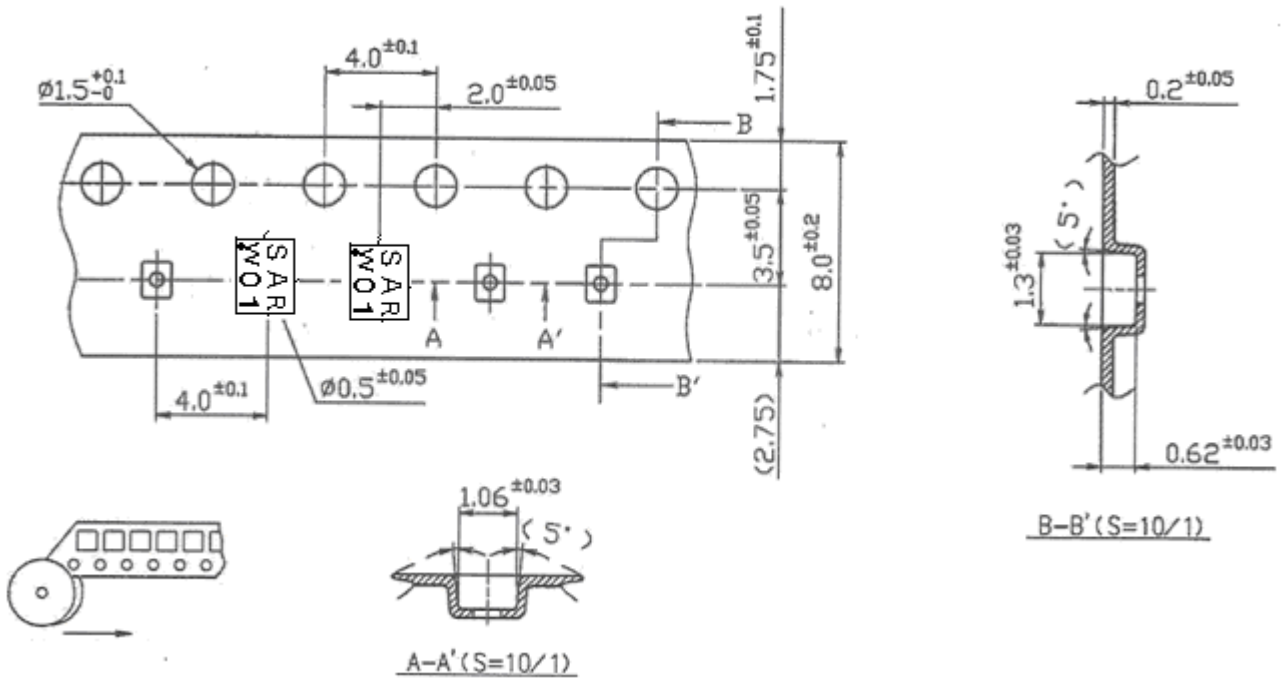
| Year | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2015 | a | b | c | d | e | f | g | h | j | k | l | m |
| 2016 | n | p | q | r | s | t | u | v | w | x | y | z |
|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

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

PACKING:
 REEL DIMENSION



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 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.

