

# SAW Resonator 1033.333 MHz

MODEL NO.: TC0556A

REV. 2.0

## A. FEATURES:

- 1-Port Resonator.

## 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

RoHS Compliant  
Lead free  
Lead-free soldering

## C. ELECTRICAL CHARACTERISTICS:

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	1033.283	1033.333	1033.383
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.5	2.0
Equivalent Elements				
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.25	-
Motional inductance <b>L1</b>	<b>μH</b>	-	19	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	15	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	2.3	-
Temp.coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover To	<b>deg.C</b>	5	20	35
Package size		SMD 3.8X3.8X1.4mm		

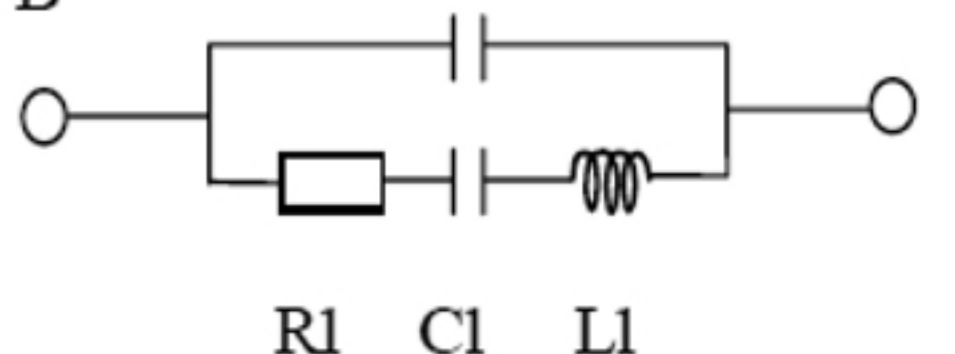
## D. EQUIVALENT CIRCUIT:

One-Port Resonator:

Source Impedance

50Ω

#B

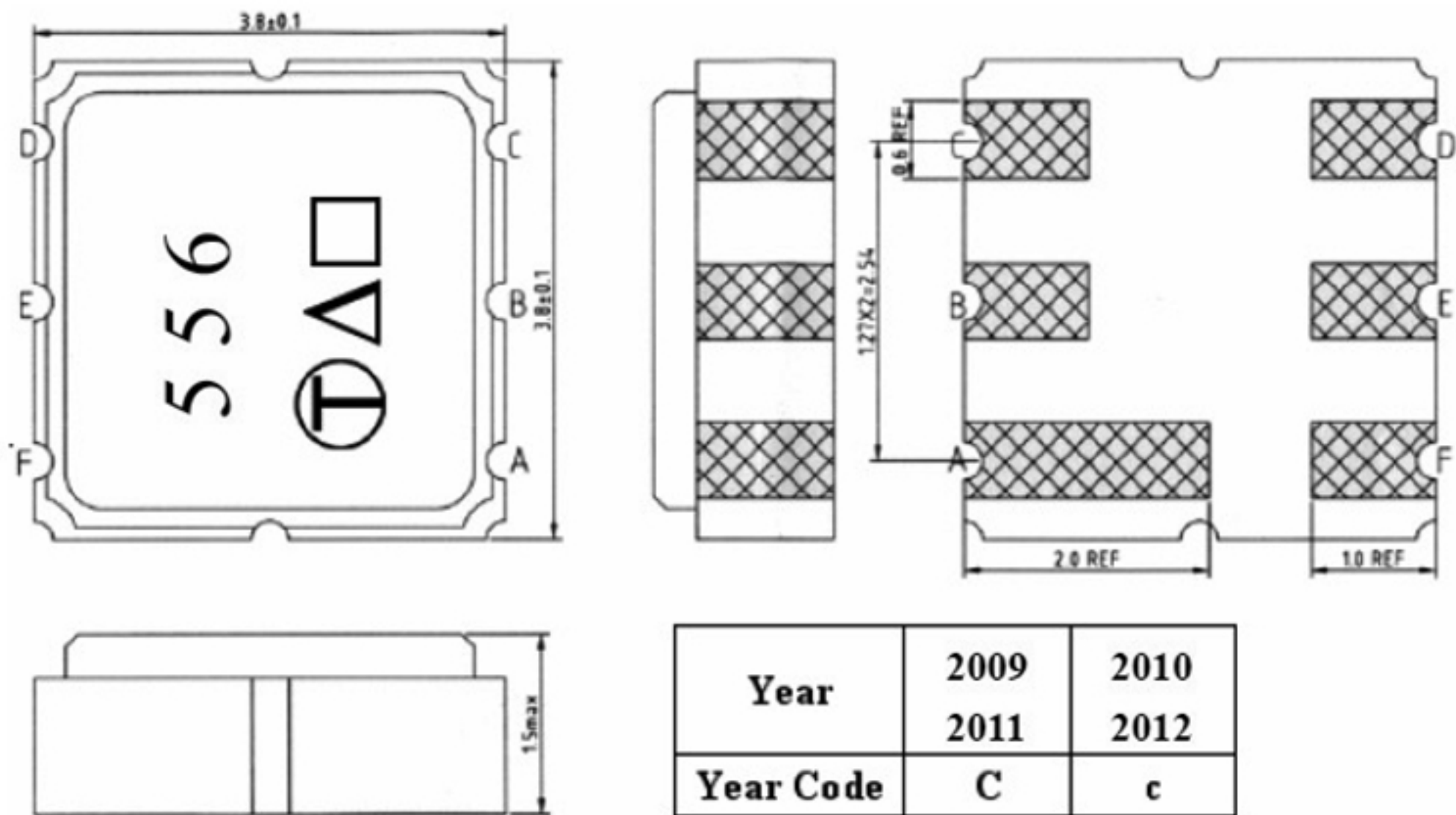


Load Impedance

50Ω

R1 C1 L1

## E. OUTLINEDRAWING:



#E : Input or Output

#B : Output or Input

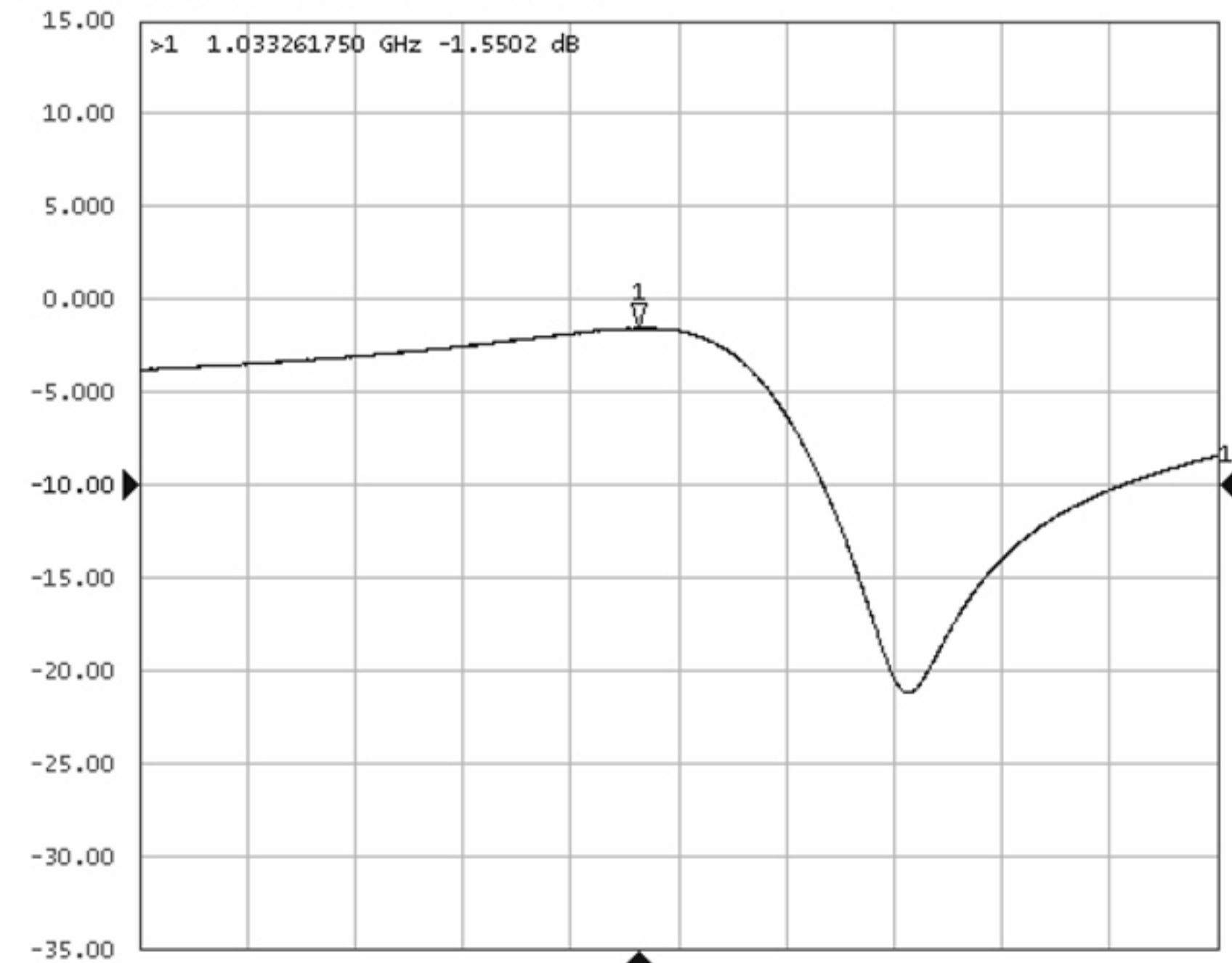
#A、C、D、F : Ground

Δ : Year Code

□ : Data Code(Follow the table provided by planer each year )

## F. FREQUENCY CHARACTERISTICS:

S21 Log Mag 5.000dB/ Ret -10.00dB [F2]



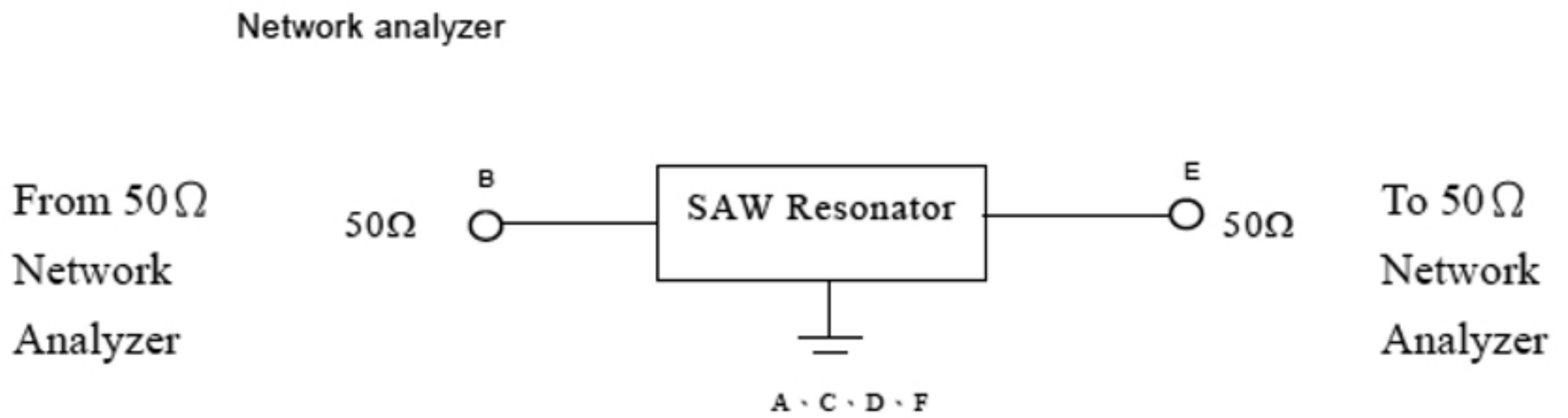
Center 1.033333 GHz

IFBW 20 kHz

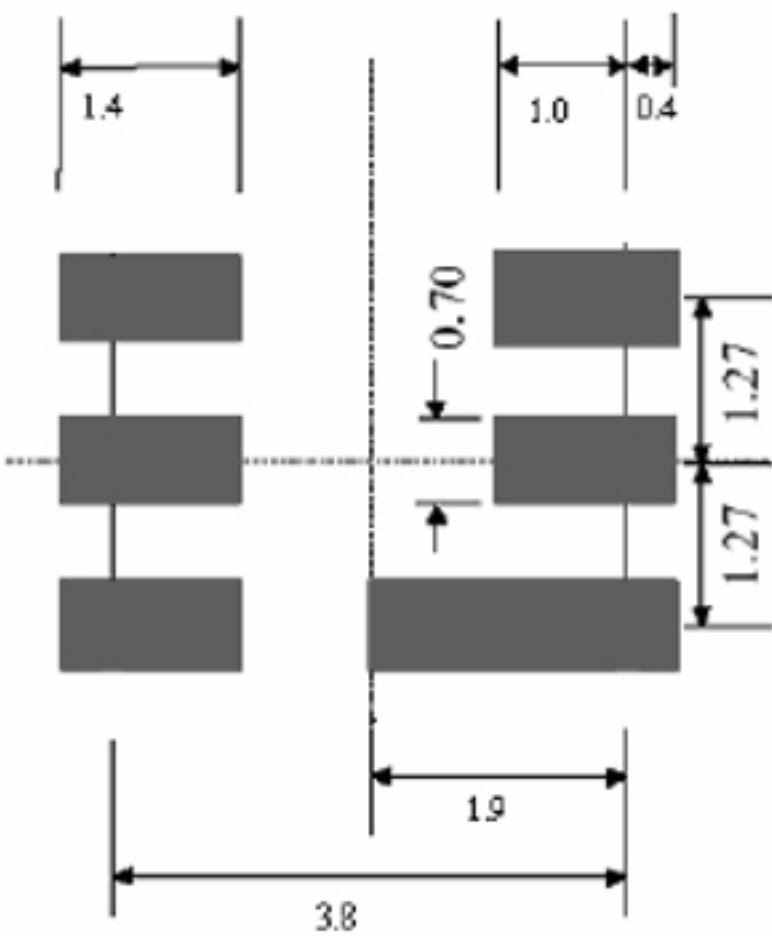
Span 2 MHz

Cor

## G. TEST CIRCUIT:

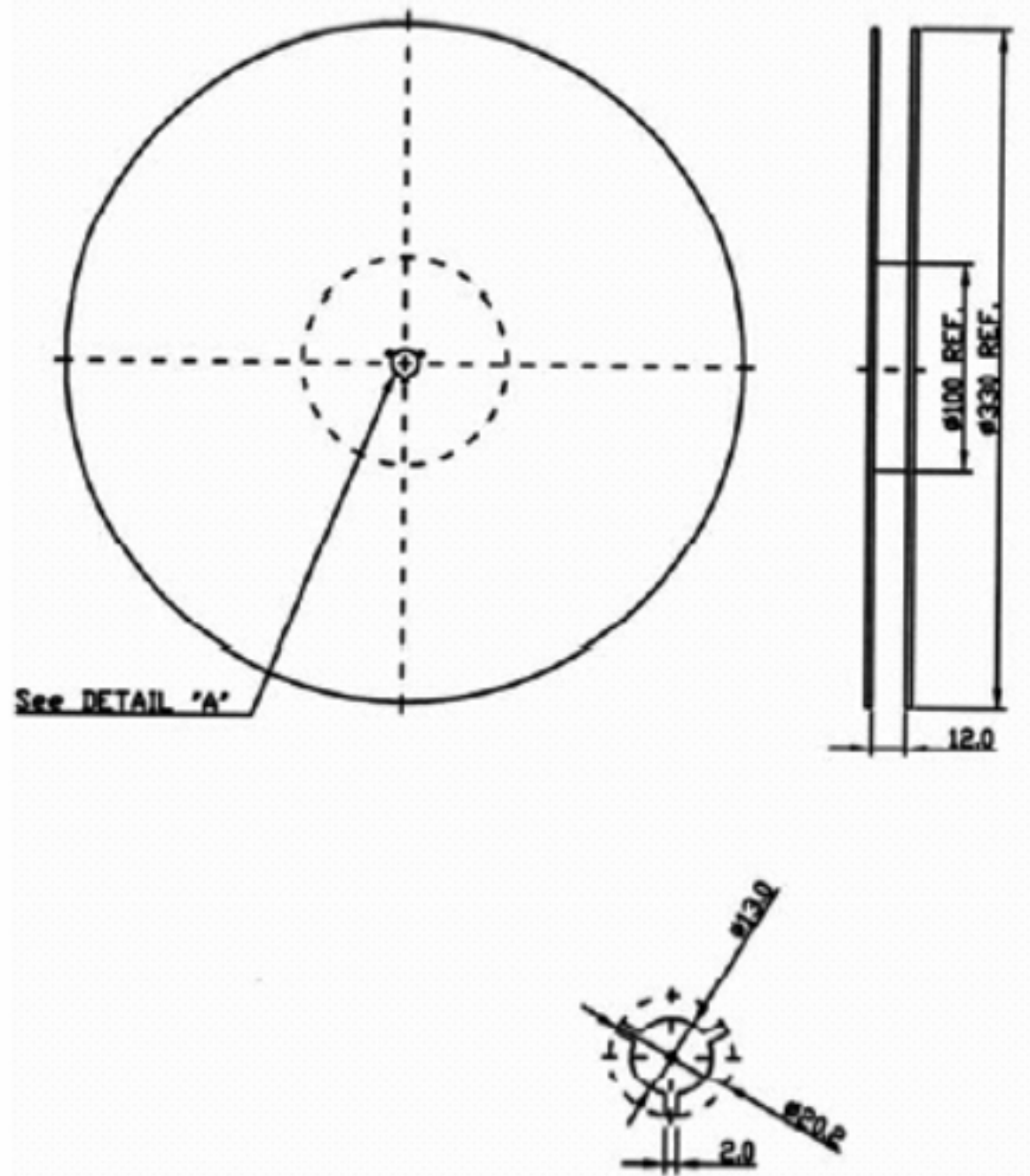


## H. PCB FOOTPRINT:

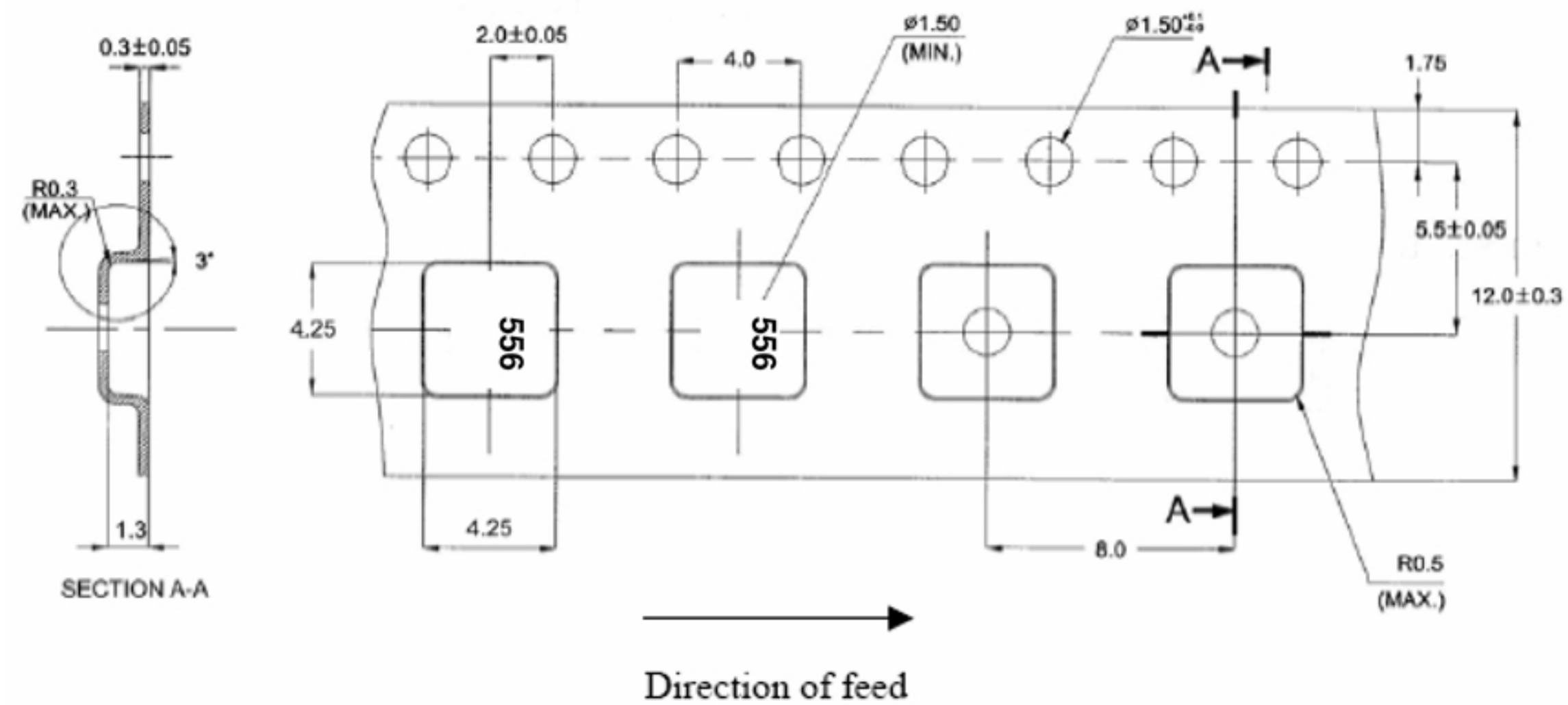


# I. PACKING:

## 1. REEL DIMENSION



## 2. TAPE DIMENSION



## J. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at  $150\sim 180^{\circ}\text{C}$  for 60~90 seconds.
2. Ascending time to preheating temperature  $150^{\circ}\text{C}$  shall be 30 seconds min.
3. Heating shall be fixed at  $220^{\circ}\text{C}$  for 50~80 seconds and at  $260^{\circ}\text{C} +0/-5^{\circ}\text{C}$  peak (20~40sec).
4. Time: 2 times.

