

SAW Resonator 868.35MHz

MODEL NO.: TC0331B

REV. NO.: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: Level 1 (MSL1)

C. ELECTRICAL CHARACTERISTICS:

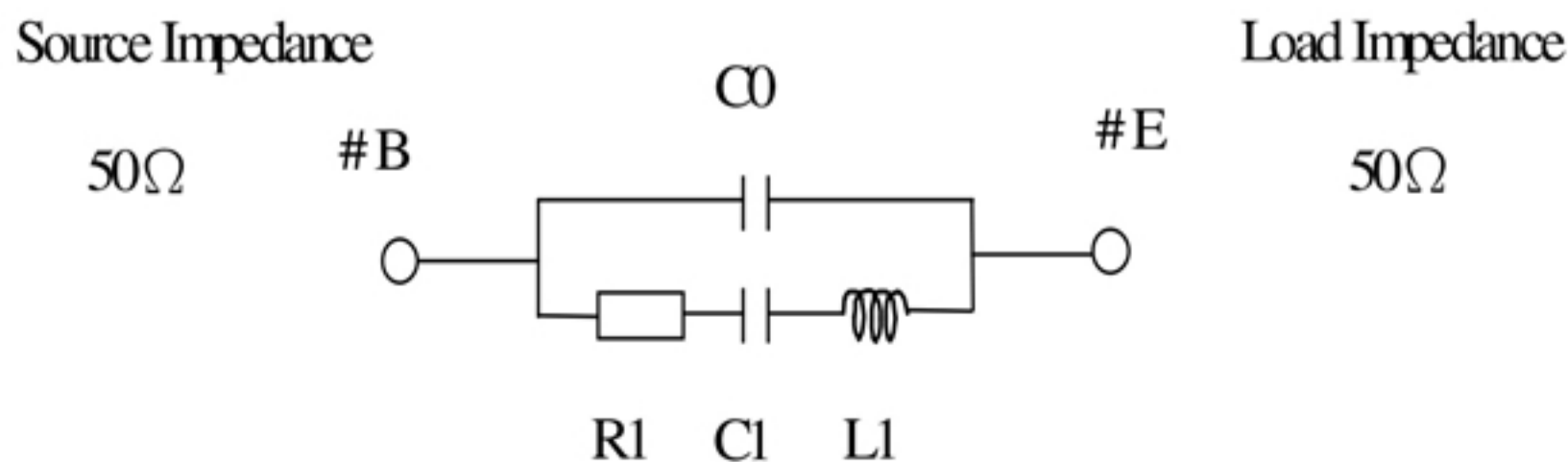
Reference Temperature $T_A=25^\circ\text{C}$

Characteristic	Units	Minimum	Typical	Maximum
Center frequency Fc	MHz	868.275	868.350	868.425
Insertion Loss IL	dB	-	1.5	2.5
Unload quality factor Q_U		-	9500	-
Ageing of fc	ppm/yr	-	-	±10
Motional capacitance C1	fF	-	1.02	-
Motional inductance L1	μH	-	37.2	-
Motional resistance R1	Ohm	-	21.3	-
Parallel capacitance C₀	pF	-	2.26	-
Frequency Temperature coefficient C_f)	ppm/c*2	-	0.032	-
Turnover T_o	deg.C	-	25	-
Package size		SMD 3x3x1.1 mm		

Temperature dependence of fc: $f_c(T_A)=f_c(T_O)(1+TC_f(T_A-T_O)^2)$

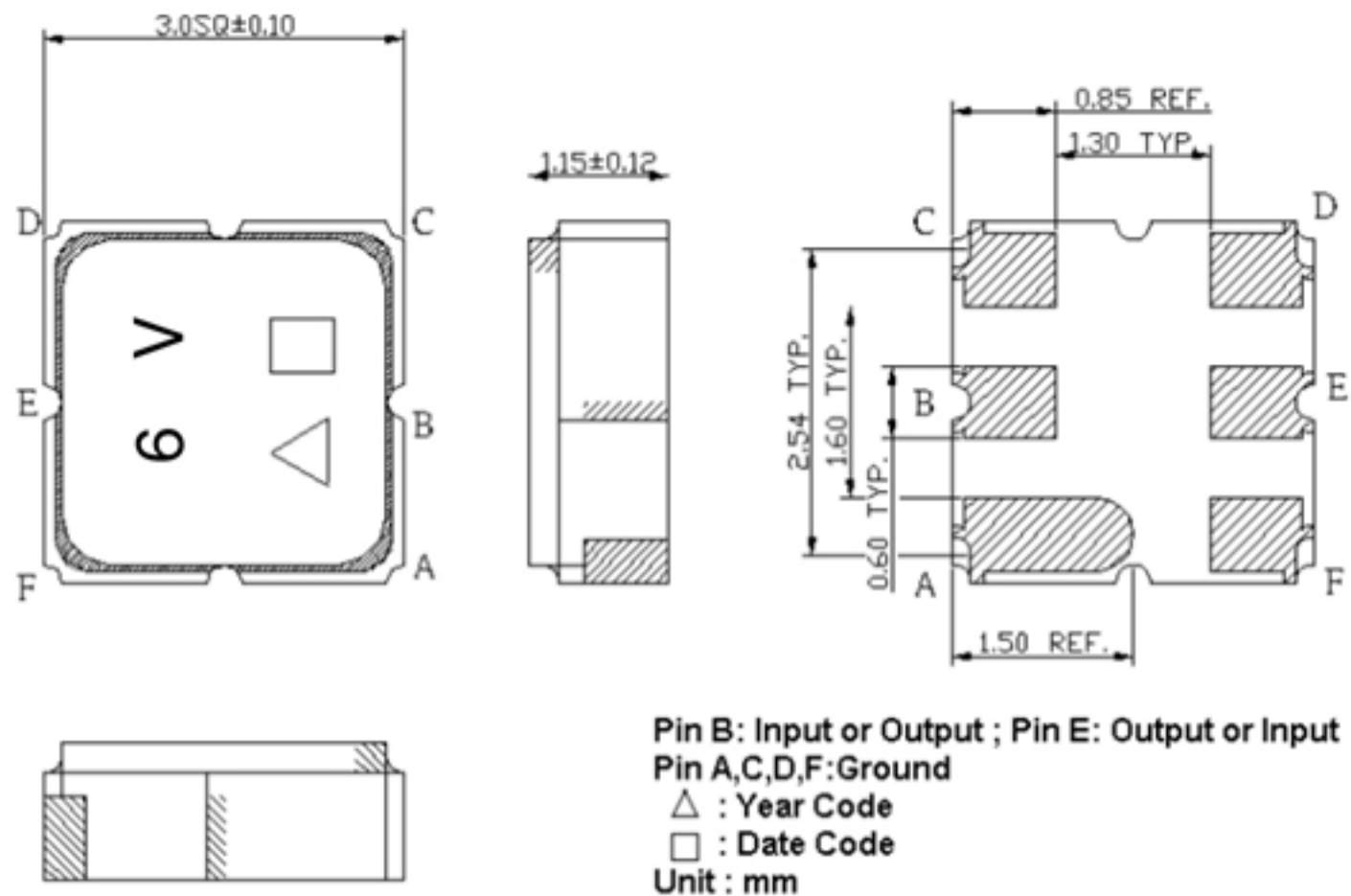
D. EQUIVALENT CIRCUIT:

One-Port Resonator:



RoHS Compliant
Lead free
Lead-free soldering

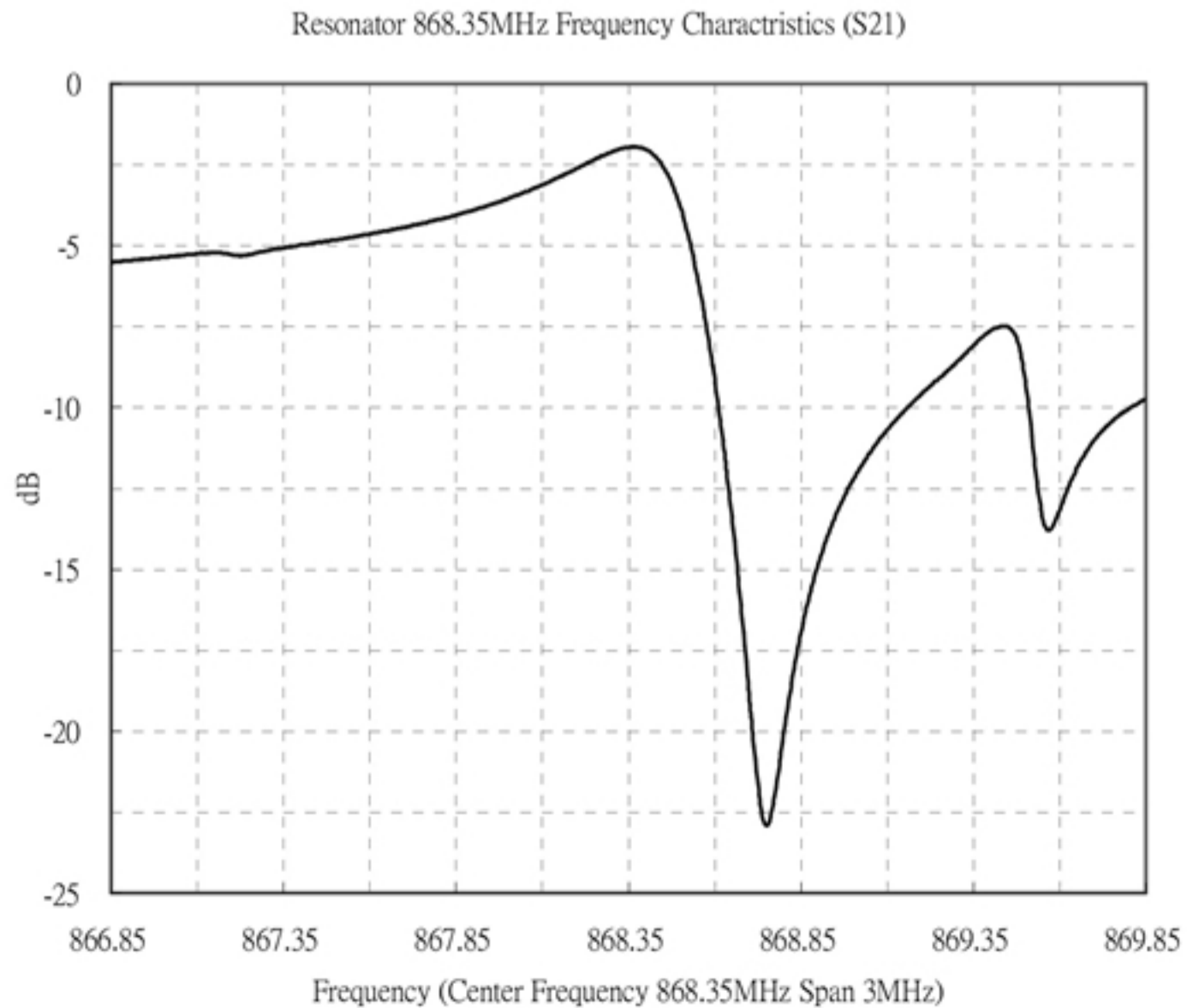
E. OUTLINE DRAWING:



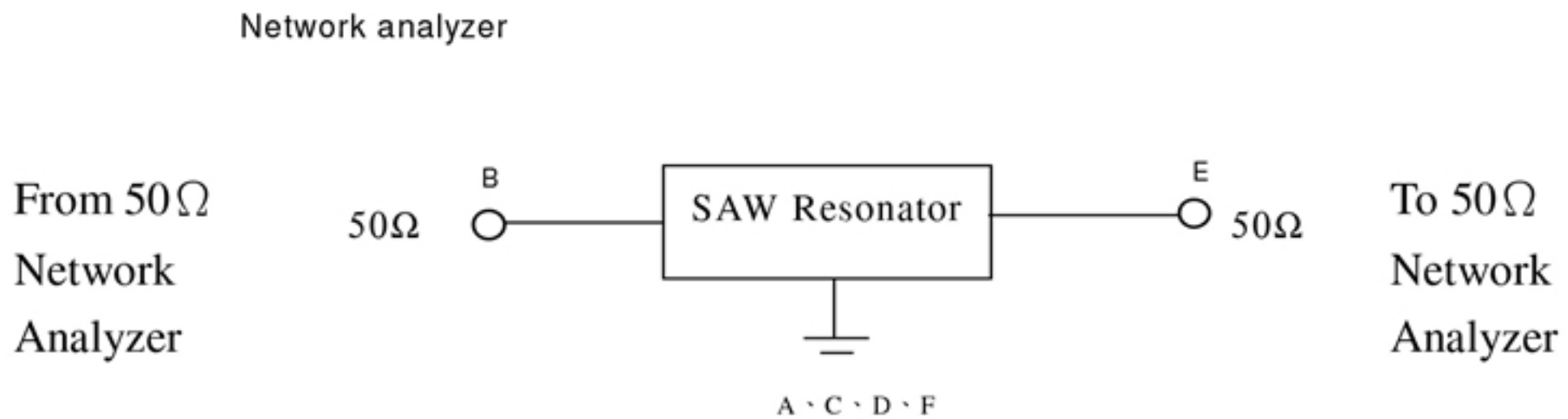
Date code: Provided by planer each year

Year code: 7 for 2007,8 for 2008,...

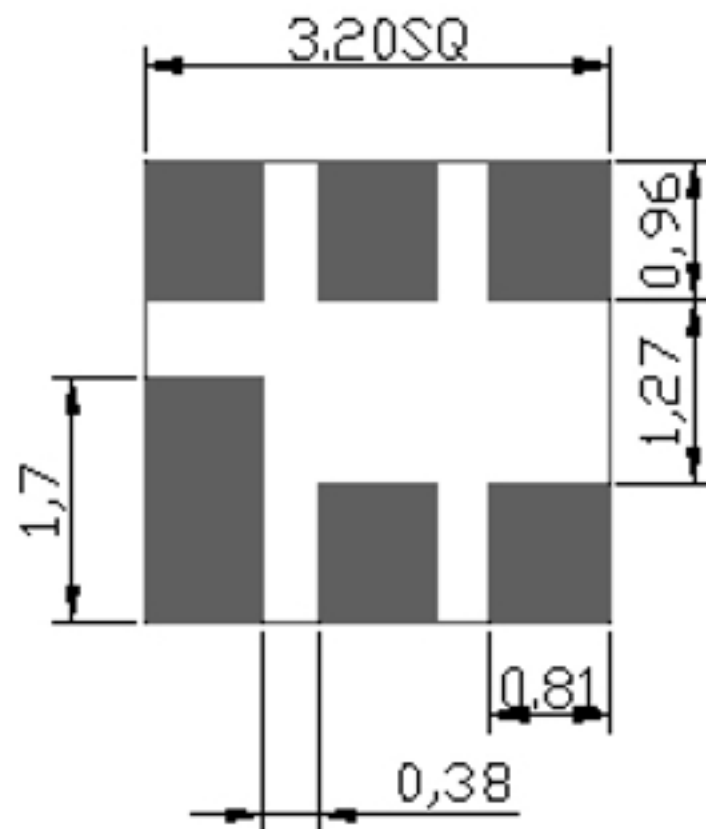
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:



H. LAND PATTERN:



H.RECOMMENDED REFLOW PROFILE:

