



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: ttsales@mail.taisaw.com Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 433.000 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0248A

Customer Parts No.: _____

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Asin Lin

Approval by: _____ Francis Chen

Date: _____ 2004/10/29



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SAW Resonator 433.0 MHz

MODEL NO.: TC0248A

REV. NO.:3

A. FEATURES:

1. 1-Port Resonator.

B. MAXIMUM RATING:

1. Input Power Level: 0 dBm

2. DC voltage: 12 V

3. Operating Temperature: -40°C to +85°C

4. Storage Temperature: -40°C to +85°C

C. ELECTRICAL CHARACTERISTICS:

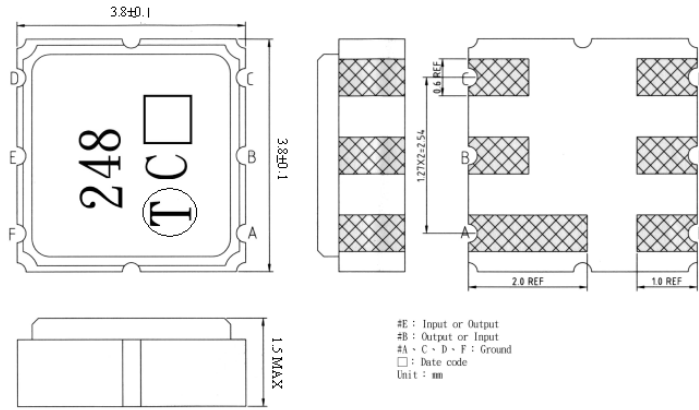
Reference Temperature $T_A=25^\circ\text{C}$

Characteristic	Units	Minimum	Typical	Maximum
Center frequency F_c	MHz	432.9	433.0	433.1
Insertion Loss IL	dB	-	0.9	2.0
Unload quality factor Q_U		6000	8000	-
Ageing of f _c	ppm/yr	-	-	±10
Motional capacitance C₁	fF	-	3.57	-
Motional inductance L₁	μH	-	37.68	-
Motional resistance R₁	Ohm	-	12.95	-
Parallel capacitance C₀	pF	-	4.77	-
Frequency Temperature coefficient C_f	ppm/c*2	-	0.032	-
Turnover T₀	deg.C	25	40	55
Package size		SMD 3.8X3.8X1.4 mm (typ.)		

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

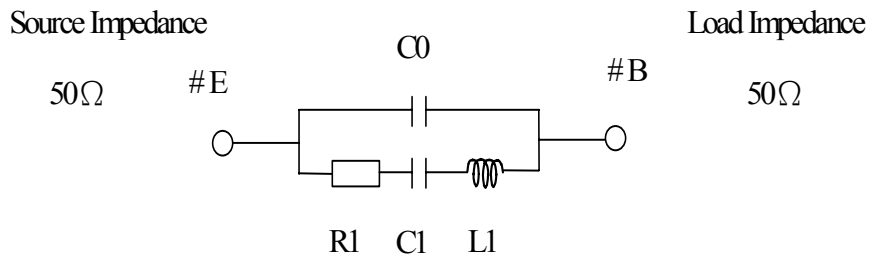
D. OUTLINE DRAWING:

RoHS Compliant
Lead free
Lead-free soldering

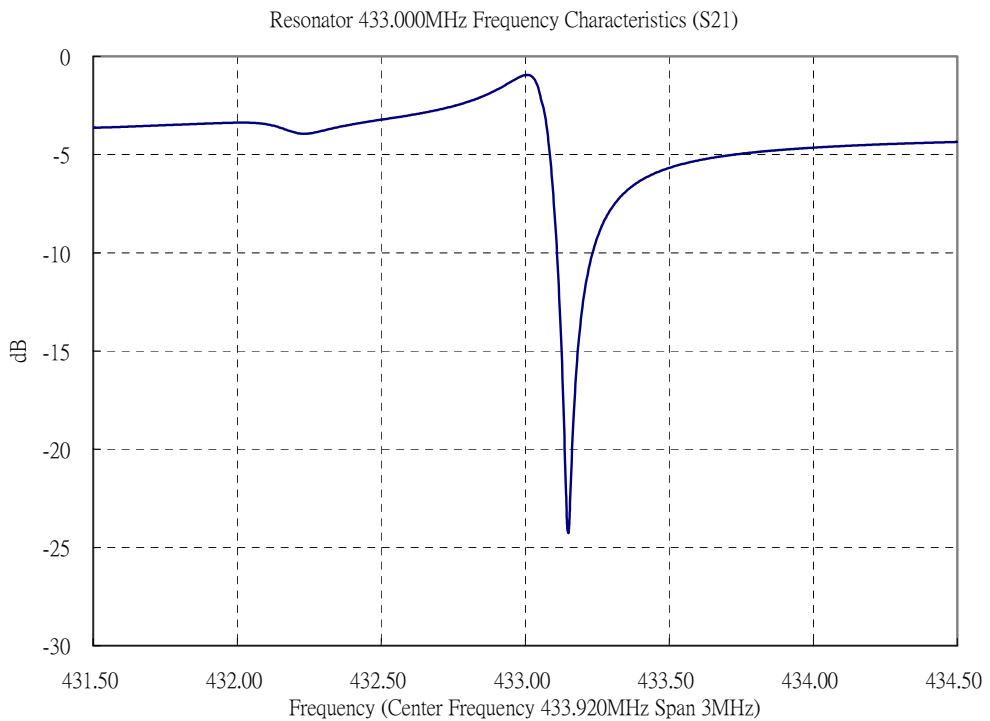


E. EQUIVALENT CIRCUIT:

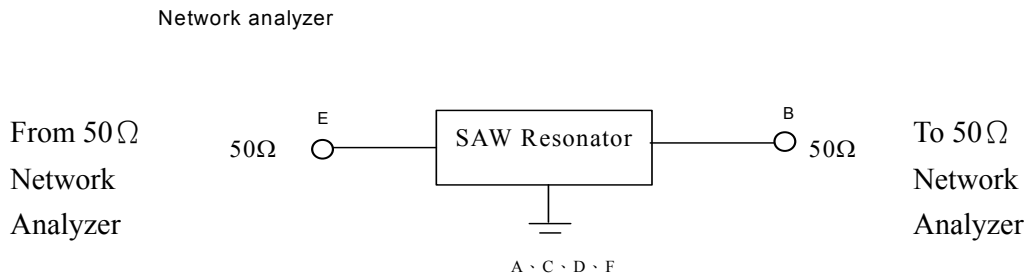
One-Port Resonator:



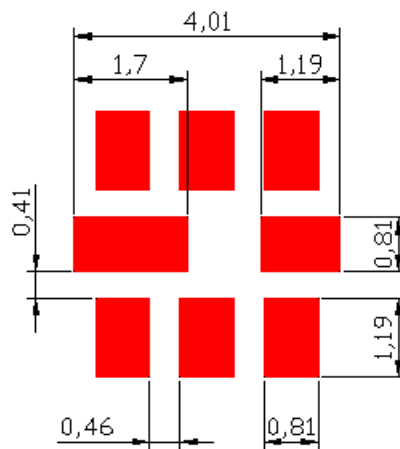
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

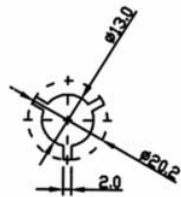
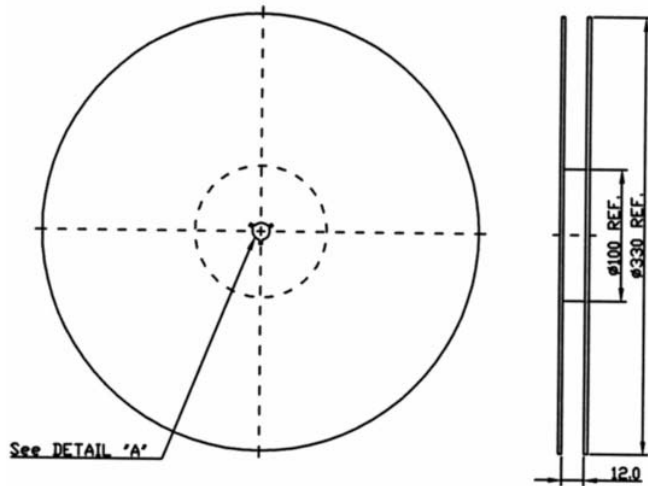


H. PCB Foot Print:



I. PACKING:

1. REEL DIMENSION



2.TAPE DIMENSION

