



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 390 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0251A

Customer Parts No.: _____

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

Checked by: Loius Chien

Approval by: Francis Chen

Date: 2004/06/09



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SAW Resonator 390 MHz

MODEL NO.: TC0251A

REV. NO.:1

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:

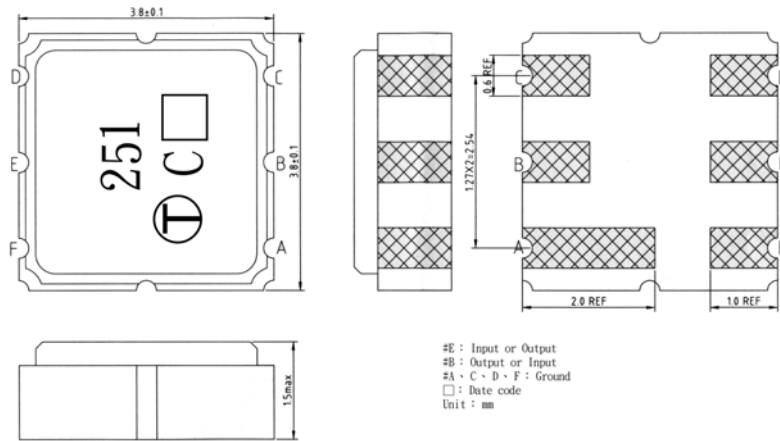
Reference Temperature $T_A=25^\circ\text{C}$

Characteristic	Units	Minimum	Typical	Maximum
Center frequency F_c	MHz	389.900	390.000	390.100
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	-	4.33	-
Motional inductance L₁	μH	-	38.46	-
Motional resistance R₁	Ohm	-	11.84	-
Parallel capacitance C_o	pF	-	5.43	-
Frequency Temperature coefficient C_f)	ppm/c*2	-	0.032	-
Turnover T_o	deg.C	10	25	40
Package size		SMD 3.8X3.8X1.1 mm		

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

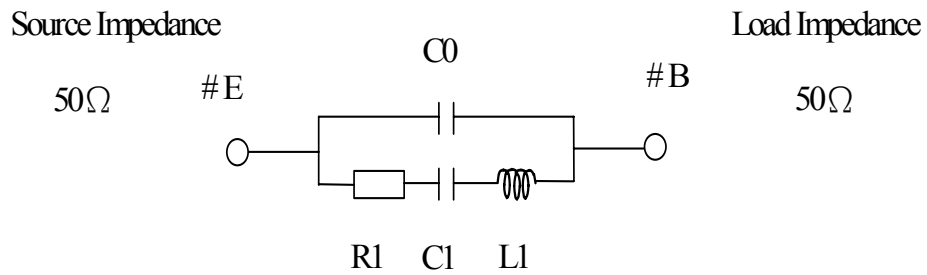
D. OUTLINE DRAWING:

RoHS Compliant
Lead free
Lead-free soldering

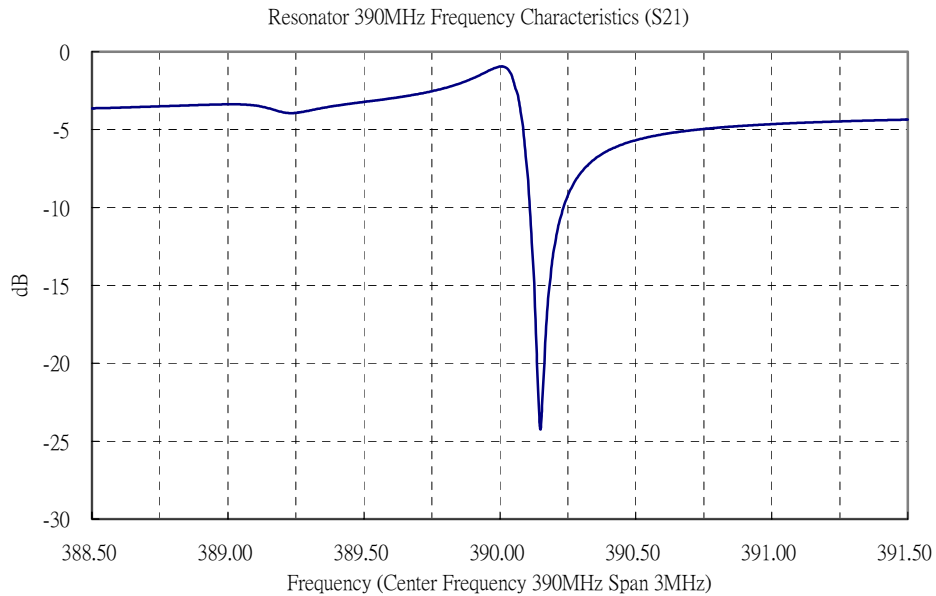


E. EQUIVALENT CIRCUIT:

One-Port Resonator:



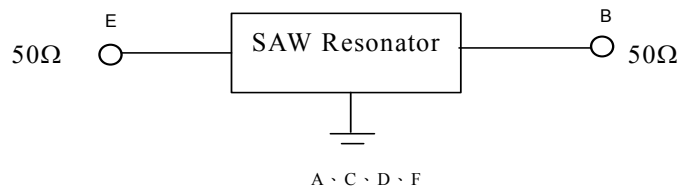
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

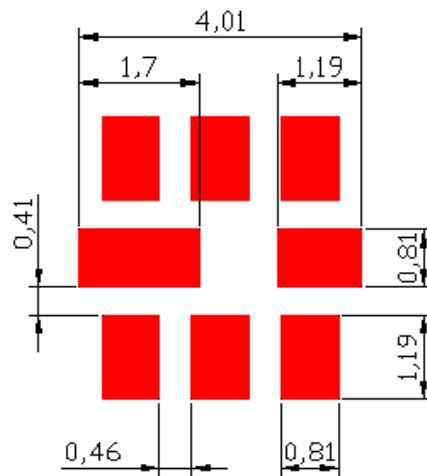
Network analyzer

From 50Ω
Network
Analyzer



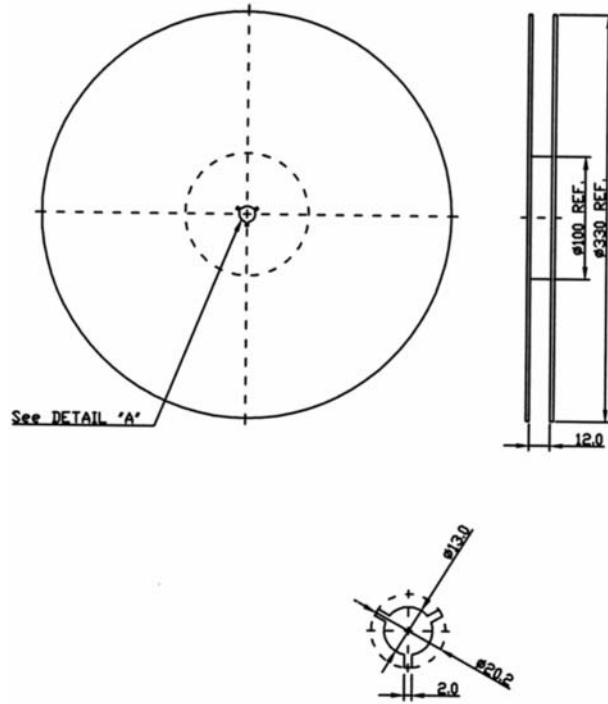
To 50Ω
Network
Analyzer

H. PCB Foot Print:

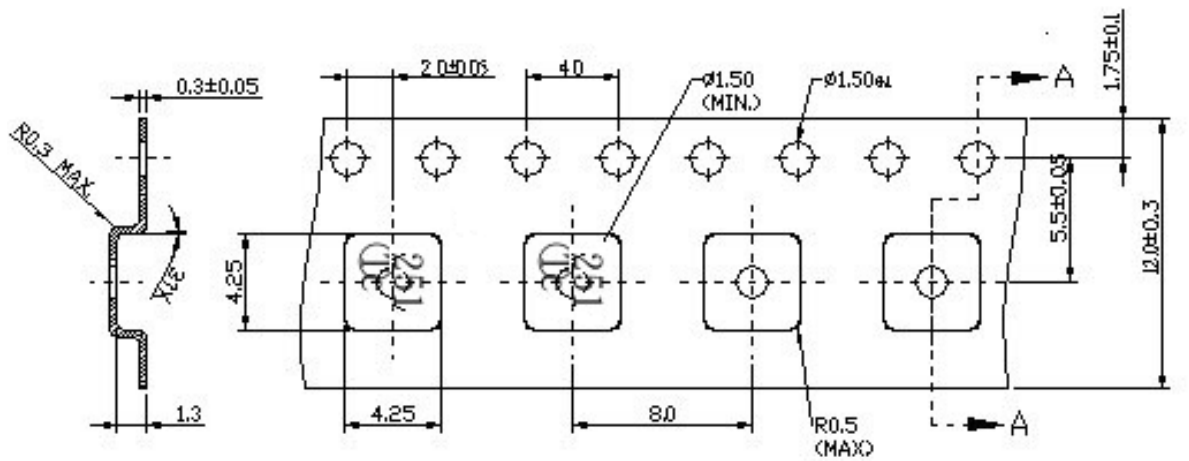


I. PACKING:

1. REEL DIMENSION



2.TAPE DIMENSION



Section A-A

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Feed Direction