



# TAI-SAW TECHNOLOGY CO., LTD.

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

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 433.920 MHz SMD 5X5 mm

TST Parts No.: TC433EDC

Customer Parts No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Stanley Tian

Approval by: \_\_\_\_\_ Francis Chen

Date: \_\_\_\_\_ 2005/05/02



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## SAW Resonator 433.92 MHz

MODEL NO.: TC433EDC

REV. NO.:1

### A. FEATURES:

- 1-Port Resonator.

RoHS Compliant  
Lead free  
Lead-free soldering

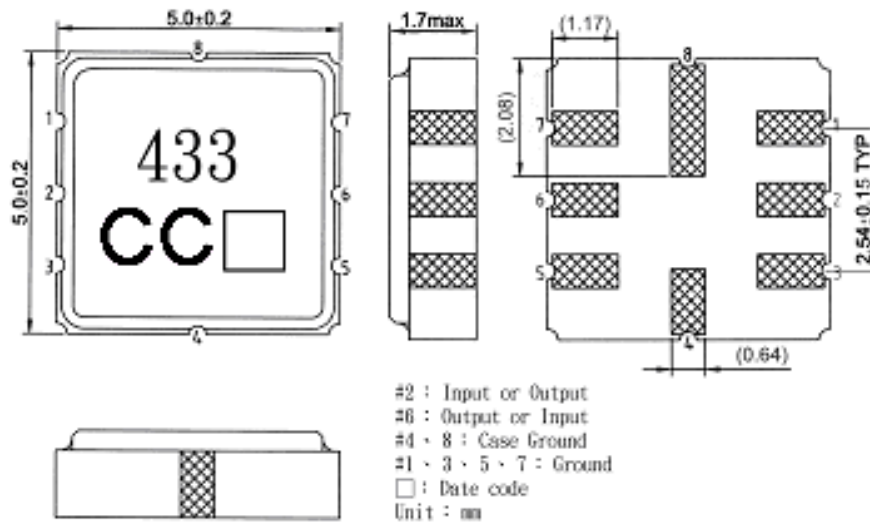
### B. MAXIMUM RATING:

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:

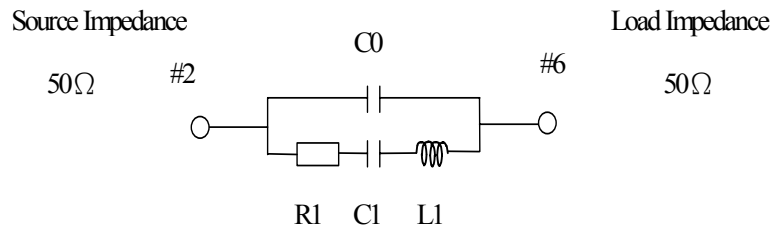
Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	433.87	433.92	433.970
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.0	2.0
Unloaded Quality factor, $Q_0$		-	13000	-
Loaded Quality factor, $Q_L$		-	1500	-
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.8	-
Motional inductance <b>L1</b>	<b>μH</b>	-	73	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	13	23
Parallel capacitance <b>Co</b>	<b>pF</b>	-	3.0	-
Temp.coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover $T_0$	<b>deg.C</b>	20	-	50
Package size		SMD5X5X1.7mm		

### D. OUTLINE DRAWING:

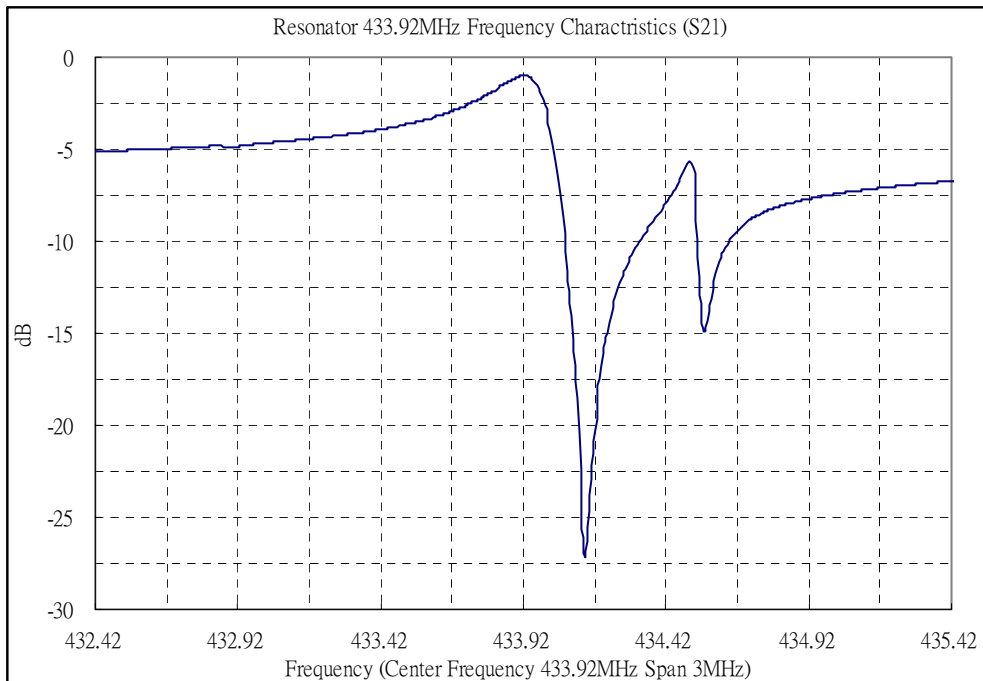


**E. EQUIVALENT CIRCUIT:**

One-Port Resonator:



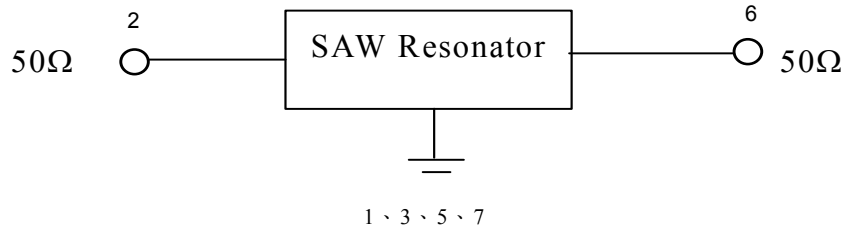
**F. FREQUENCY CHARACTERISTICS:**



**G. TEST CIRCUIT:**

Network analyzer

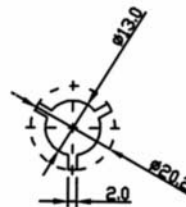
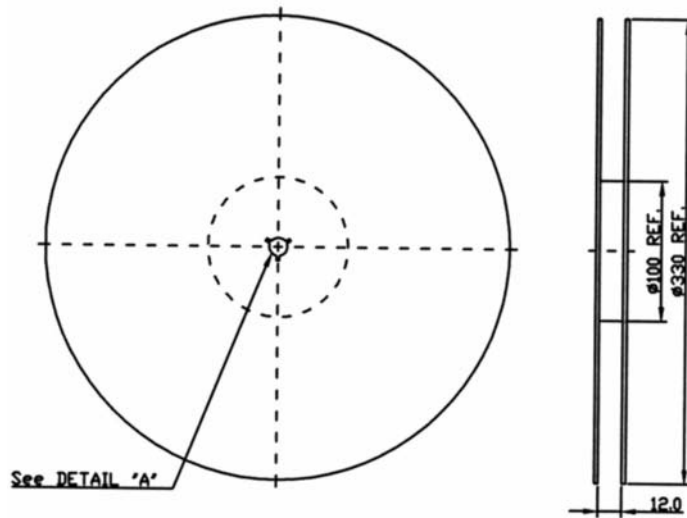
From 50Ω  
Network  
Analyzer



To 50Ω  
Network  
Analyzer

H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

