



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 403.55 MHz TO39

TST Parts No.: TD0111A

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

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

Checked by: Vincent Liu

Approval by: Francis Chen

Date: 2002/11/13



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## SAW Resonator 403.55 MHz

MODEL NO.: TD0111A

REV. NO.:2

### A. FEATURES:

1. 2-Port Resonator.

RoHS Compliant

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

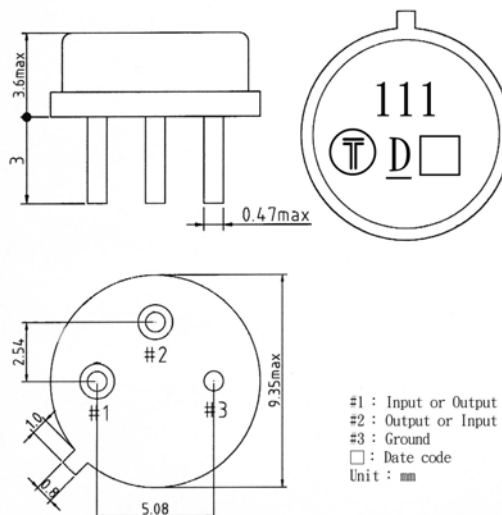
### C. ELECTRICAL CHARACTERISTICS:

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

Characteristic	Units	Minimum	Typical	Maximum
Center frequency $f_c$	<b>MHz</b>	403.429	403.550	403.671
Insertion Loss $IL$	<b>dB</b>	-	4.9	9
Unload quality factor $Q_U$		6000	13800	-
Ageing of $f_c$	<b>ppm/yr</b>	-	-	$\pm 10$
Motional capacitance $C1$	<b>fF</b>	-	0.38	-
Motional inductance $L1$	<b><math>\mu\text{H}</math></b>	-	405.94	-
Motional resistance $R1$	<b>Ohm</b>	-	74.55	-
Parallel capacitance $C_o$	<b>pF</b>	-	1.71	-
Frequency Temperature coefficient ( $TC_f$ )	<b>ppm/c*2</b>	-	0.032	-
Turnover $T_o$	<b>deg.C</b>	10	25	40
Package size		TO39		

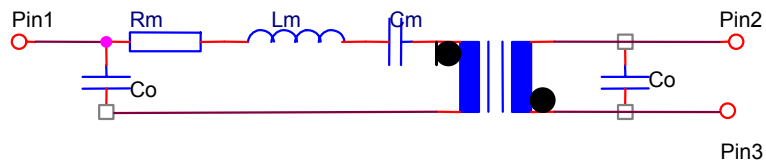
Temperature dependence of  $f_c$ :  $f_c(T_A)=f_c(T_O)(1+TC_f(T_A-T_O)^2)$

### D. OUTLINE DRAWING:

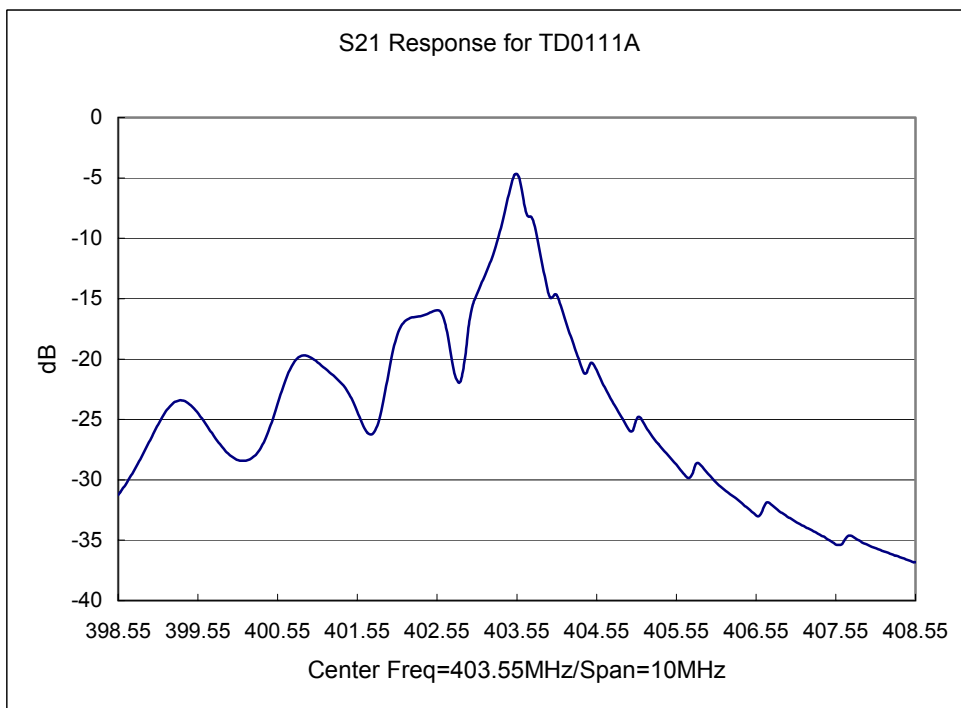


E. EQUIVALENT CIRCUIT:

Two-Port Resonator:



F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

Network analyzer

