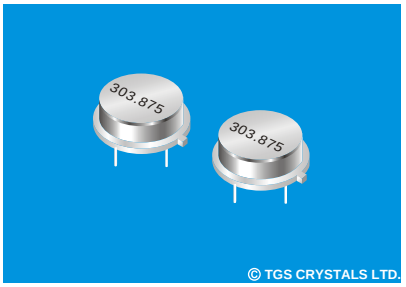
SAW RESONATORS

SR303.875-T

FEATURES

- The SR303.875-T is a true one-port, Surface-acoustic-wave(SAW) resonator in a low-profile, TO-39 case. It provides reliable, fundamental-mode, quartz frequency stabilization of fixed-frequency transmitters operating at 303.875MHz.



APPLICATIONS

- Remote Control

SPECIFICATION *

Parameters			Product	Option Code
			SR	SR
Centre Frequency(fc) :		303.875MHz	▲	303.875
Frequency Tolerance(△fc):		±75KHz	△	A
		±100KHz	△	B
		±150KHz	△	C
		±200KHz	△	D
Temp. Stability	Turnover Temp(To):	55℃Max.	▲	
	Turnover Frequency(fo):	fc 303.875 MHz	▲	
	Frequency Temp. Coefficient (FTC):	0.037ppm/℃²	▲	
Insertion Loss(IL):		1.8 dB Max.	▲	
Operating Temp. Range:		-10℃~+60℃	▲	
Storage Temp. Range:		-40℃~+85℃	▲	
Quality Factor	Unloaded Q(Qu):	13,800	▲	
	50Ω Loaded Q(QL):	1,800	▲	
DC Insulation Resistance between Any Two Pins:		1.0MΩ Min.	▲	
Frequency Aging Absolute Value During the First Year(fA):		≤10ppm/year	▲	
RF Equivalent RLC Model	Motional Resistance(RM):	23Ω Max.	▲	
	Motional Inductance(LM):	109.010 μH	▲	
	Motional Capacitance(CM):	2.5319 fF	▲	
	Shunt Static Capacitance (Co):	2.5 pF	▲	
CW Therefore Power Dissipation:		+10dBm	▲	
DC Voltage Between Any Two Pins:		±30V DC	▲	
Case Temperature:		-40℃~+85℃	▲	
Holder Type:		TO-39	△	T
Package:		Tube	△	U

▲ Standard * Specifications Subject to Change Without Notice
△ Optional: please specify required code when inquiring or ordering

NOTE

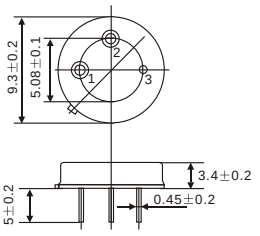
1: Electrostatic Sensitive Device. Observe precautions for handling
2. Freq. Aging is the change in fc with time and is specified at +65℃ or less. Aging may exceed the specification for prolonged temp. Above +65℃. Typiclly, aging is greatest the firstyear after manufacture, decreasingin subsequent years.
3. The centre freq. Fc , is the freq. Of minimum IL with te resonator in te specified test fixture in a 50Ω test system with VSWR≤1.2:1. Typically, $f_{oscillator}$ or $f_{transmiter}$ is less than the resonator fc.
4. Typically, equipment utilizing this device requires emissions testing and government approval. Which s the responsibility of the equipment manufacturer
5. Unless noted otherwise , case temperature Tc=+25℃ ±2℃.
6. The design, manufacturing process, and specifications of this device are subject to change without notice.
7. Derived mathematically from one or more of the following directly measured parameters: f_c, IL, 3dB bandwidth, f_c versus T_c , and C_o
8. Turnover temperature, T_o is the temperature of maximum (or turnover) freq., f_o. The nominal center freq. at any case temp., T_c, may be calculated from : $f = f_o [1-FTC (T_o-T_c)^2]$. Typically, oscillator T_o is appr. equal to the specified resonator To.

PART NUMBER GUIDE

TGS	SR	303.875	A	T	U
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 303.875 A T U

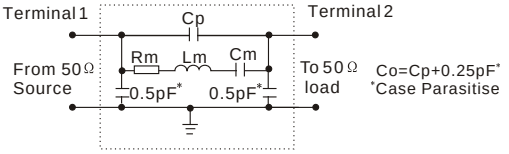
DIMENSIONS



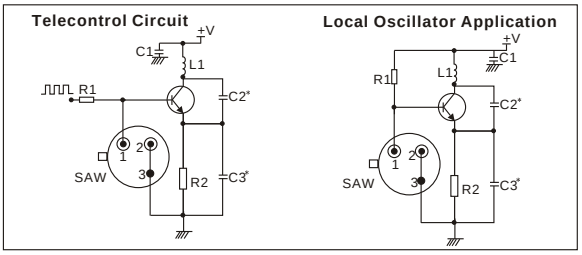
Pin	Connection
1	Terminal 1
2	Terminal 2
3	Case Ground

Unit: mm

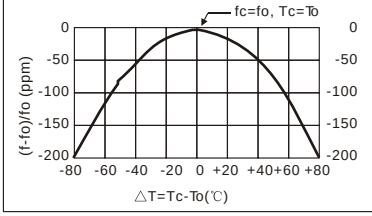
EQUIVALENT LC MODE



TYPICAL APPLICATION CIRCUIT

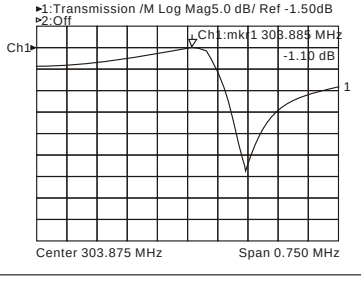


TEMPERATURE CHARACTERISTICS



The Cure shown above accounts for resonator contribution only and does not include oscillator temperature characteristics

TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.