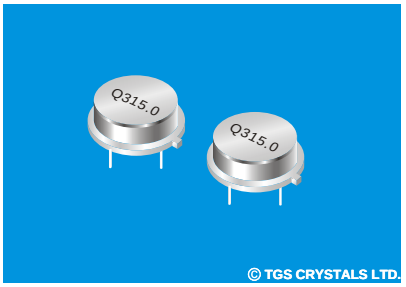
SAW RESONATORS

SRQ315.0-T

FEATURES

- The SRQ315.0-T is a true two-port, 180° surface-acoustic-wave(SAW) resonator in a low-profile TO-39 case . It provides reliable, fundamental-mode, quartz frequency stabilization of fixed-freq. Transmitters operating at 315.00MHz



APPLICATIONS

- Remote Control

SPECIFICATION *

Parameters			Product	Option Code
			SRQ	SRQ
Centre Frequency(fc) :		315.000MHz	▲	315.000
Frequency Tolerance(△fc):		±75KHz	△	A
		±100KHz	△	B
		±150KHz	△	C
		±200KHZ	△	D
Temp. Stability	Turnover Temp(To):	55℃Max.	▲	
	Turnover Frequency(fo):	fc 315.000 MHz	▲	
	Frequency Temp. Coefficient (FTC):	0.037ppm/℃²	▲	
Insertion Loss(IL):		8 dB Max.	▲	
Operating Temp. Range:		-10℃~+60℃	▲	
Storage Temp. Range:		-40℃~+85℃	▲	
Quality Factor	Unloaded Q(Q_U):	3,600	▲	
	50Ω Loaded Q(Q_L):	6,800	▲	
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(R_M):	151Ω Max.	▲	
	Motional Inductance(L_M):	712.7804 μH	▲	
	Motional Capacitance(C_M):	0.38537 fF	▲	
	Shunt Static Capacitance (Co):	1.3 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

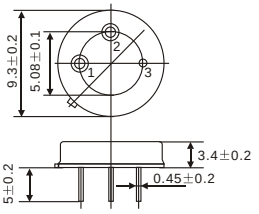
1: Electrostatic Sensitive Device. Observe precautions for handling
2. Freq. Aging is the change in fc with time and is specified at +65℃ or less. Aging may exceed the specification for prolonged temp. Above +65℃. Typicllly, aging is greatest the first year after manufacture, decreasing in subsequent 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_o)²]. Typically, oscillator T_o is 20℃ lss than the specified resonator To.

PART NUMBER GUIDE

TGS	SRQ	315	B	T	U
Mark	SAW Resonators Two-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SRQ 315.00 B T U

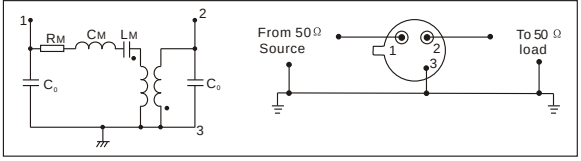
DIMENSIONS



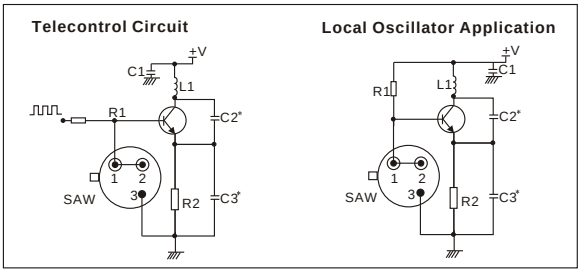
Pin	Connection
1	Terminal 1
2	Terminal 2
3	Case Ground

Unit: mm

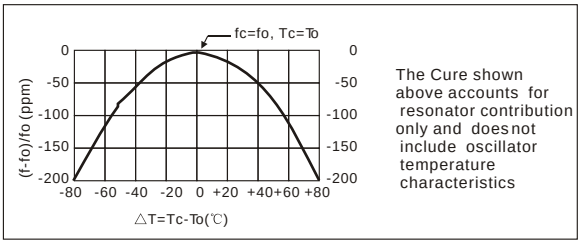
EQUIVALENT LC MODE AND TEST CIRCUIT



TYPICAL APPLICATION CIRCUIT

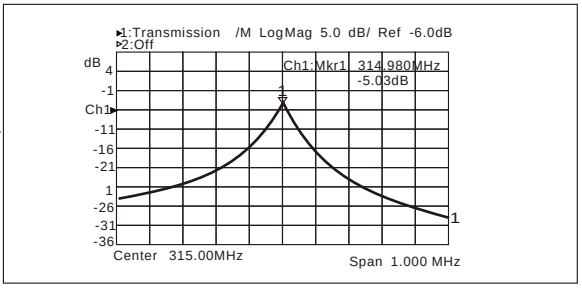


TEMPERATURE CHARACTERISTICS



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.