

FEATURES

- The SRQ824.25-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-frequency LOS operating at 824.25MHz.



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APPLICATIONS

- Communication

SPECIFICATION *

Parameters		Product	Option Code
		SRQ	SRQ
Centre Frequency(fc) :	824.25MHz	▲	824.250
Frequency Tolerance(Δ fc):	± 150 KHz	△	C
	± 200 KHz	△	D
	± 250 KHz	△	E
Temp. Stability	Turnover Temp(T_o): 55°C Max.	▲	
	Turnover Frequency(f_o): fc 824.25 MHz	▲	
	Frequency Temp. Coefficient (FTC): 0.037ppm/°C ²	▲	
Insertion Loss(IL):	8 dB Max.	▲	
Operating Temp. Range:	-10°C~+60°C	▲	
Storage Temp. Range:	-40°C~+85°C	▲	
Quality Factor	Unloaded Q(Q_u): 7,000	▲	
	50 Ω Loaded Q(Q_L): 3,500	▲	
DC Insulation Resistance between Any Two Pins:	1.0M Ω Min.	▲	
Frequency Aging Absolute Value During the First Year(fA):	≤ 10 ppm/year	▲	
RF Equivalent RLC Model	Motional Resistance(R_m): 151 Ω Max.	▲	
	Motional Inductance(L_m): 135.232 μ H	▲	
	Motional Capacitance(C_m): 0.2760 fF	▲	
	Shunt Static Capacitance (C_o): 2.65 pF	▲	
CW Therefore Power Dissipation:	+10dBm	▲	
DC Voltage Between Any Two Pins:	± 30 V DC	▲	
Case Temperature:	-40°C~+85°C	▲	
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

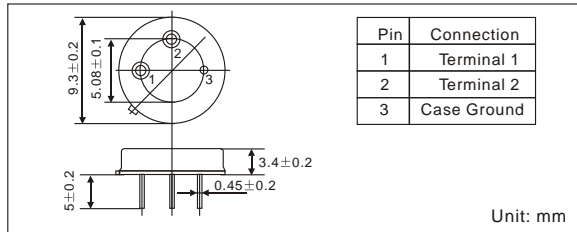
1. Electrostatic Sensitive Device. Observe precautions for handling
2. Freq. Aging is the change in fc with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temp. Above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
3. The centre freq. f_c is the freq. Of minimum IL with te resonator in te specified test fixture in a 50 Ω test system with VSWR $\leq 1.2:1$. Typically, $f_{oscillator}$ or $f_{transmitter}$ 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 $T_c = +25^\circ C \pm 2^\circ C$.
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: fc, IL, 3 dB bandwidth, fc versus Tc , and Co
8. Turnover temperature, T_o , is the temperature of maximum (or turnover) freq., f_o . The nominal centre freq. at any case temp. , T_c , may be calculated from :
 $f = f_o [1 - FTC (T_c - T_o)^2]$. Typically, oscillator T_o is 20°C less than the specified resonator T_o .

PART NUMBER GUIDE

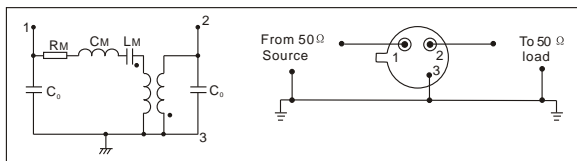
TGS	SRQ	824.25	C	T	U
Mark	SAW Resonators Two-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SRQ 824.25 C T U

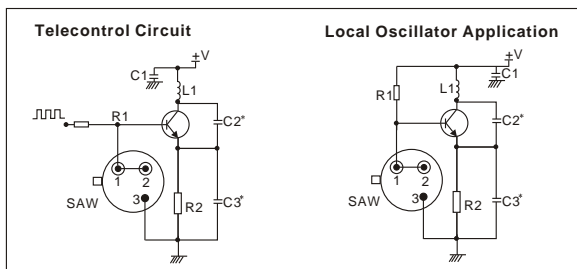
DIMENSIONS



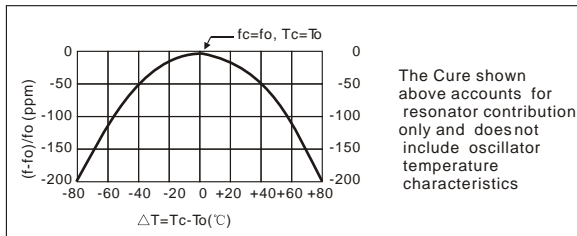
EQUIVALENT LC MODE AND TEST CIRCUIT



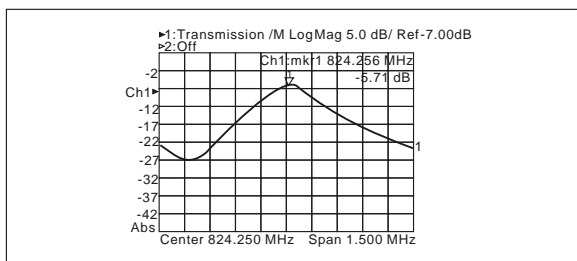
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.

