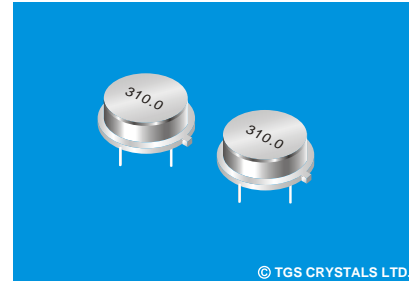


FEATURES

- The SR310-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 310.0MHz.

APPLICATIONS

- Remote Control



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SPECIFICATION *

Parameters		Product	Option Code
		SR	SR
Centre Frequency(fc) :	310.000MHz	▲	310.000
Frequency Tolerance(Δ fc):	± 75 KHz	Δ	A
	± 100 KHz	Δ	B
	± 150 KHz	Δ	C
	± 200 KHz	Δ	D
Temp. Stability	Turnover Temp(T_o): 55°C Max.	▲	
	Turnover Frequency(f_o): fc 310.0 MHz	▲	
	Frequency Temp. Coefficient (FTC): $0.037\text{ppm}/^\circ\text{C}^2$	▲	
Insertion Loss(IL):	2.0 dB Max.	▲	
Operating Temp. Range:	$-10^\circ\text{C}\sim+60^\circ\text{C}$	▲	
Storage Temp. Range:	$-40^\circ\text{C}\sim+85^\circ\text{C}$	▲	
Quality Factor	Unloaded Q(Q _u): 15,333	▲	
	50 Ω Loaded Q(Q _L): 2,000	▲	
DC Insulation Resistance between Any Two Pins:	1.0M Ω Min.	▲	
Frequency Aging Absolute Value During the First Year(fA):	$\leq 10\text{ppm}/\text{year}$	▲	
RF Equivalent RLC Model	Motional Resistance(R _m): 24 Ω Max.	▲	
	Motional Inductance(L _m): 118.143 μH	▲	
	Motional Capacitance(C _m): 2.2333 fF	▲	
	Shunt Static Capacitance (C _o): 2.1 pF	▲	
CW Therefore Power Dissipation:	+10dBm	▲	
DC Voltage Between Any Two Pins:	$\pm 30\text{V}$ DC	▲	
Case Temperature:	$-40^\circ\text{C}\sim+85^\circ\text{C}$	▲	
Holder Type:	TO-39	Δ	T
Package:	Tube	▲	U

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

NOTE

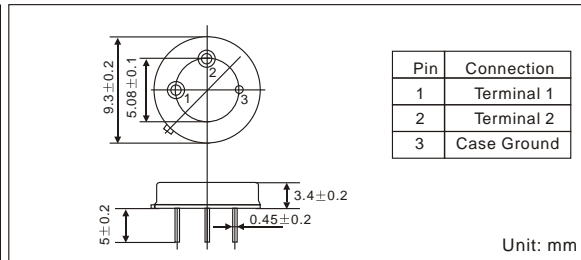
- 1: Electrostatic Sensitive Device. Observe precautions for handling
- 2: Freq. Aging is the change in fc with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temp. Above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
- 3: The centre freq. Fc, 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 Tc= $+25^\circ\text{C}\pm 2^\circ\text{C}$.
- 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 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. , Tc, may be calculated from : f = f_o[1-FTC (T_c-T_o)²]. Typically, oscillator T_o is appr. equal to the specified resonator T_o.

PART NUMBER GUIDE

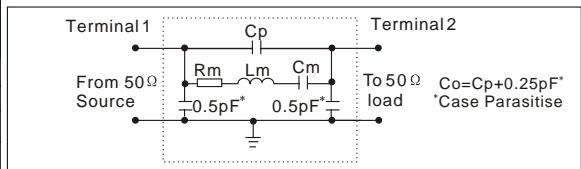
TGS	SR	310	A	T	U
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 310.0 A T U

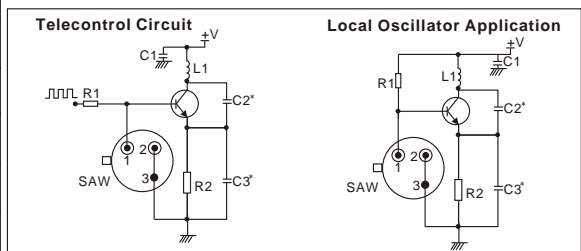
DIMENSIONS



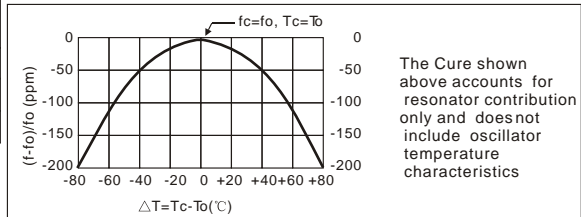
EQUIVALENT LC MODE



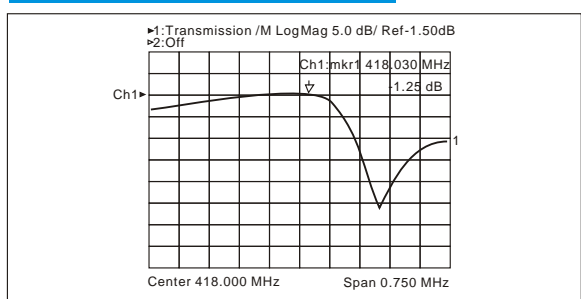
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.

