

FEATURES

- The SR980-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 980.0MHz.

APPLICATIONS

- Communication

SPECIFICATION *

Parameters		Product	Option Code
		SR	SR
Centre Frequency(fc) :	980.000MHz	▲	980.000
Frequency Tolerance(Δ fc):	± 150 KHz	Δ	C
	± 200 KHz	Δ	D
	± 250 KHz	Δ	E
Temp. Stability	Turnover Temp(T_o): 55°C Max.	▲	
	Turnover Frequency(f_o): fc 980.0 MHz	▲	
	Frequency Temp. Coefficient (FTC): 0.037ppm/°C ²	▲	
Insertion Loss(IL):	1.8 dB Max.	▲	
Operating Temp. Range:	-10°C~+60°C	▲	
Storage Temp. Range:	-40°C~+85°C	▲	
Quality Factor	Unloaded Q(Q_u): 14,000	▲	
	50 Ω Loaded Q(Q_L): 1,500	▲	
DC Insulation Resistance between Any Two Pins: 1.0M Ω Min.		▲	
Frequency Aging Absolute Value During the First Year(f_A): ≤ 10 ppm/year		▲	
RF Equivalent RLC Model	Motional Resistance(R_m): 23 Ω Max.	▲	
	Motional Inductance(L_m): 27.298 μ H	▲	
	Motional Capacitance(C_m): 0.9672 fF	▲	
	Shunt Static Capacitance (C_o): 2.4 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	Δ	T
Package:	Tube	Δ	U

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

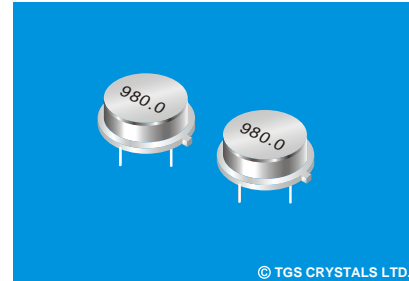
NOTE

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. F_c , is the freq. Of minimum IL with the resonator in the 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 is 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 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., f_c , may be calculated from: $f = f_o [1 - FTC (T_o - T_c)^2]$. Typically, oscillator T_o is 20°C less than the specified resonator T_o .

PART NUMBER GUIDE

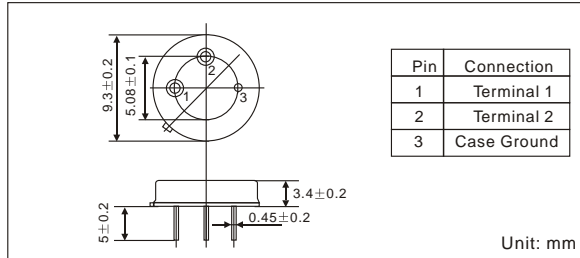
TGS	SR	980	C	M3	T
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 980.0 C T U

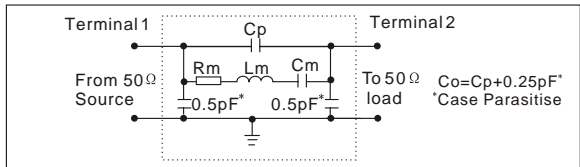


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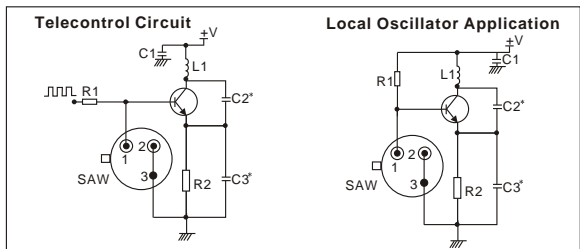
DIMENSIONS



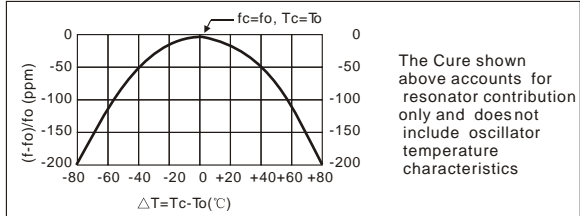
EQUIVALENT LC MODE



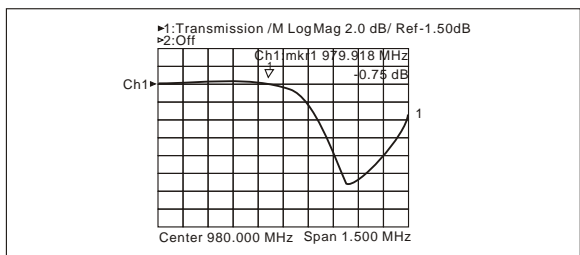
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.

