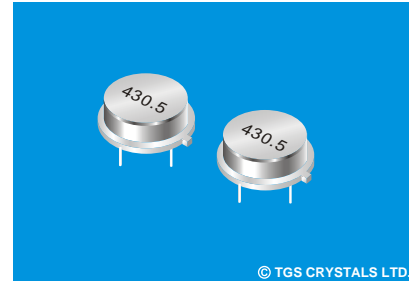


FEATURES

- The SR430.5-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 430.5MHz.

APPLICATIONS

- Remote Control



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SPECIFICATION *

Parameters		Product	Option Code
		SR	SR
Centre Frequency(f_c) :	430.50MHz	▲	430.50
Frequency Tolerance(Δf_c):	± 75 KHz	△	A
	± 100 KHz	△	B
	± 150 KHz	△	C
	± 200 KHz	△	D
Temp. Stability	Turnover Temp(T_o): 55°C Max.	▲	
	Turnover Frequency(f_o): f_c 430.5 MHz	▲	
	Frequency Temp. Coefficient (FTC): 0.037 ppm/ $^\circ\text{C}^2$	▲	
Insertion Loss(IL):	2.8 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):	▲	12,500
	$50\ \Omega$ Loaded Q(Q_L):	▲	2,000
DC Insulation Resistance between Any Two Pins:	$1.0\text{M}\ \Omega$ Min.	▲	
Frequency Aging Absolute Value During the First Year(f_A):	≤ 10 ppm/year	▲	
RF Equivalent RLC Model	Motional Resistance(R_m): $29\ \Omega$ Max.	▲	
	Motional Inductance(L_m): $120.311\ \mu\text{H}$	▲	
	Motional Capacitance(C_m): $2.1240\ \text{fF}$	▲	
	Shunt Static Capacitance (C_o): $1.8\ \text{pF}$	▲	
CW Therefore Power Dissipation:	$+10\text{dBm}$	▲	
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	△	T
Package:	Tube	△	U

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

NOTE

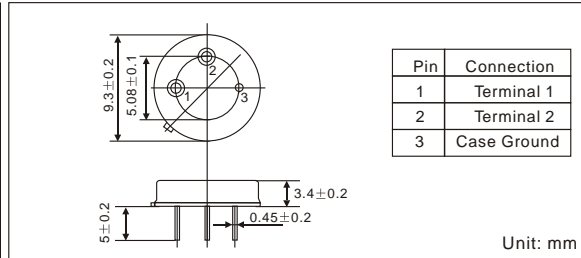
1. Electrostatic Sensitive Device. Observe precautions for handling
2. Freq. Aging is the change in f_c with time and is specified at $+65^\circ\text{C}$ or less. Aging may exceed the specification for prolonged temp. Above $+65^\circ\text{C}$. Typically, aging is greatest the first year after manufacture, 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 $50\ \Omega$ test system with $VSWR \leq 1.2:1$. Typically, $f_{oscillator}$ or $f_{transmitter}$ is less than the resonator f_c .
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 $T_c = +25^\circ\text{C} \pm 2^\circ\text{C}$.
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: f_c , IL, 3 dB 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 :
 $f = f_o [1 - \text{FTC} (T_c - T_o)^2]$. Typically, oscillator T_o is 20°C less than the specified resonator T_o .

PART NUMBER GUIDE

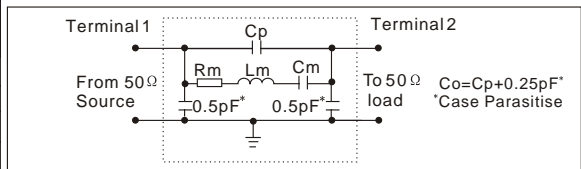
TGS	SR	430.5	A	T	U
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 430.5 A T U

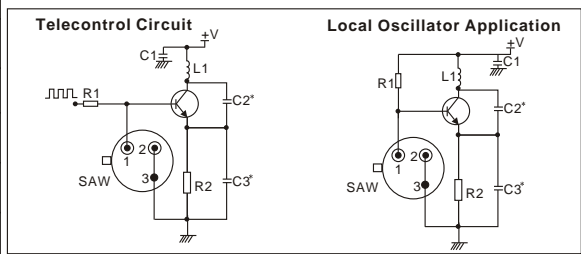
DIMENSIONS



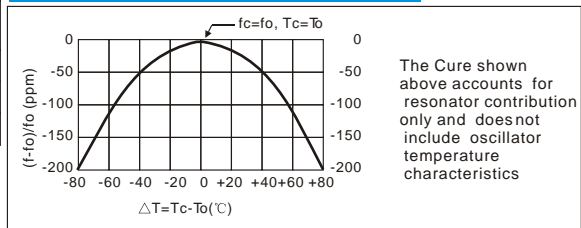
EQUIVALENT LC MODE



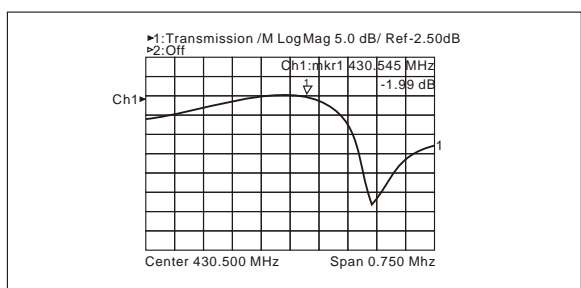
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.

