

FEATURES

- The SR868.30-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 868.30MHz.

APPLICATIONS

- Remote Control

SPECIFICATION *

Parameters		Product	Option Code
		SR	SR
Centre Frequency(f_c) :	868.300MHz	▲	868.300
Frequency Tolerance(Δf_c):	± 150 KHz	△	C
	± 200 KHz	△	D
	± 250 KHz	△	E
Temp. Stability	Turnover Temp(T_o): 55°C Max.	▲	
	Turnover Frequency(f_o): fc 868.3 MHz	▲	
	Frequency Temp. Coefficient (FTC): 0.037ppm/°C ²	▲	
Insertion Loss(IL):	2.0 dB Max.	▲	
Operating Temp. Range:	-10°C~+60°C	▲	
Storage Temp. Range:	-40°C~+85°C	▲	
Quality Factor	Unloaded Q(Q_u): 9,400	▲	
	50Ω Loaded Q(Q_L): 1,500	▲	
DC Insulation Resistance between Any Two Pins:		1.0MΩ Min.	▲
Frequency Aging Absolute Value During the First Year(f_A):		≤10ppm/year	▲
RF Equivalent RLC Model	Motional Resistance(R_m): 26Ω Max.	▲	
	Motional Inductance(L_m): 32.735 μH	▲	
	Motional Capacitance(C_m): 1.0274 fF	▲	
	Shunt Static Capacitance (C_o): 2.0 pF	▲	
CW Therefore Power Dissipation:		+10dBm	▲
DC Voltage Between Any Two Pins:		±30V 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 f_c 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 50Ω test system with VSWR ≤ 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 is the responsibility of the equipment manufacturer
5. Unless noted otherwise, case temperature $T_c = +25°C \pm 2°C$.
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, 3dB bandwidth, f_t versus T_c , and C_o
8. Turnover temperature, T_o is the temperature of maximum (or turnover) freq., f_t . The nominal center 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

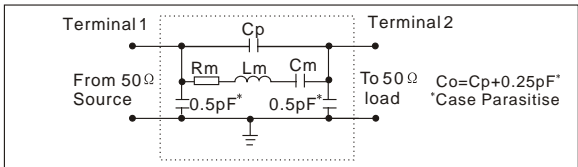
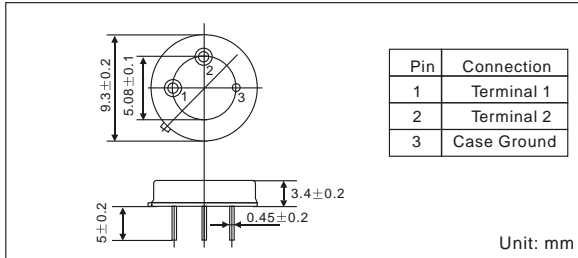
TGS	SR	868.3	C	T	U
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 868.3 C T U

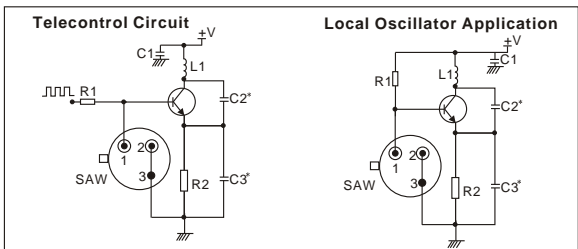


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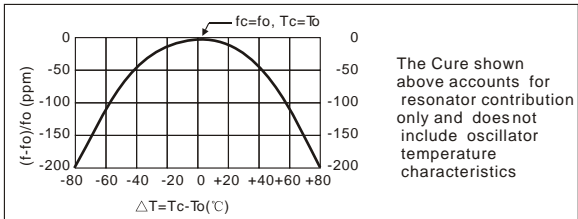
DIMENSIONS



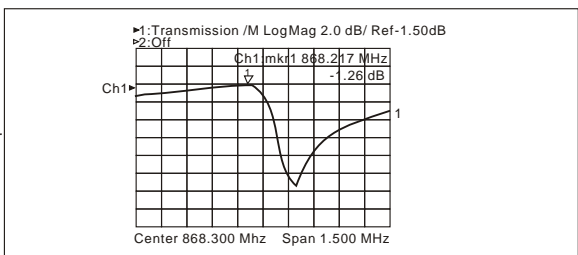
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.

