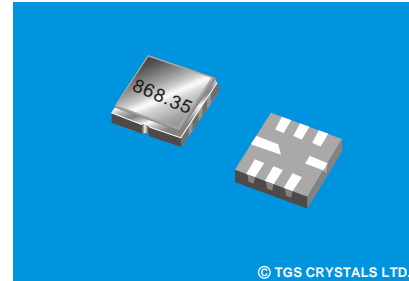


FEATURES

- The SR868.35-M3 is a true one-port, Surface-acoustic-wave(SAW) resonator in a surface-mount, ceramic M3 case. It provides reliable, fundamental-mode, quartz frequency stabilization offixed- frequency transmitters operating at 868.35MHz.

APPLICATIONS

- Communication



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SPECIFICATION \*

Parameters		Product	Option Code
		SR	SR
Centre Frequency(fc) :	868.350MHz	▲	868.350
Frequency Tolerance(Δfc):	±150KHz	△	C
	±200KHz	△	D
	±250KHz	△	E
Temp. Stability	Turnover Temp(To): 55°C Max.	▲	
	Turnover Frequency(fo): fc 868.35 MHz	▲	
	Frequency Temp. Coefficient (FTC): 0.037ppm/°C <sup>2</sup>	▲	
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(Qu):	9,000	▲
	50 Ω Loaded Q(QL):	1,500	▲
DC Insulation Resistance between Any Two Pins:		1.0M Ω Min.	▲
Frequency Aging Absolute Value During the First Year(fA):		≤10ppm/year	▲
RF Equivalent RLC Model	Motional Resistance(Rm):	26 Ω Max.	▲
	Motional Inductance(Lm):	43.3251 μ H	▲
	Motional Capacitance(Cm):	0.776 fF	▲
	Shunt Static Capacitance (Co):	2.8 pF Max.	▲
CW Therefore Power Dissipation:		+10dBm	▲
DC Voltage Between Any Two Pins:		±30V DC	▲
Case Temperature:	-40°C~+85°C	▲	
Soldering Temperature:	+235°C	▲	
Holder Type:	5.0X5.0X1.35mm	△	M3
Package:	Tape/Reel	△	T

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

NOTE

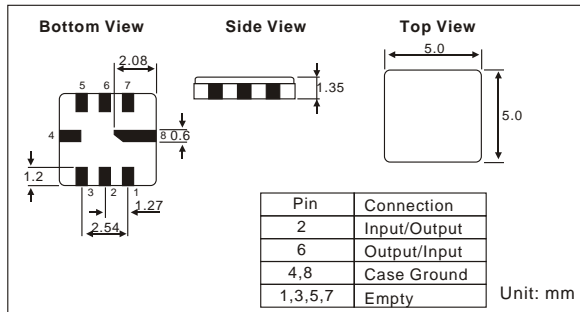
1. Electrostatic Sensitive Device. Observe precautions for handling
2. Freq. aging is the change in f<sub>c</sub> with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temp. above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
3. The center freq., f<sub>c</sub>, is measured at the minimum insertion loss point, IL<sub>min</sub>, with the resonator in the 50 Ω test system (VSWR ≤ 1.2:1). Typically, T<sub>c,oscillator</sub> or f<sub>c,transmitter</sub> is appr. equal to the resonator f<sub>c</sub>.
4. Typically, equipment utilizing this device requires emissions approval, which is the responsibility of the equipment manufacturer.
5. Unless noted otherwise, case temperature T<sub>c</sub> = +25°C ± 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<sub>c</sub>, IL, 3 dB bandwidth, f<sub>t</sub> versus T<sub>c</sub>, and C<sub>o</sub>.
8. Turnover temperature, T<sub>o</sub> is the temperature of maximum (or turnover) freq., f<sub>t</sub>. The nominal center freq. at any case temp., T<sub>c</sub>, may be calculated from: f = f<sub>t</sub> [1 - FTC (T<sub>c</sub> - T<sub>o</sub>)<sup>2</sup>]. Typically, oscillator T<sub>o</sub> is appr. equal to the specified resonator T<sub>o</sub>.

PART NUMBER GUIDE

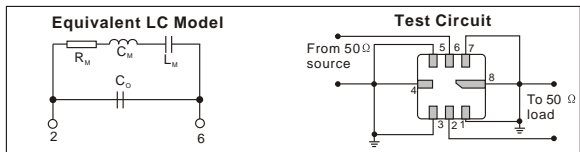
TGS	SR	868.35	C	M3	T
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 868.35 C M3 T

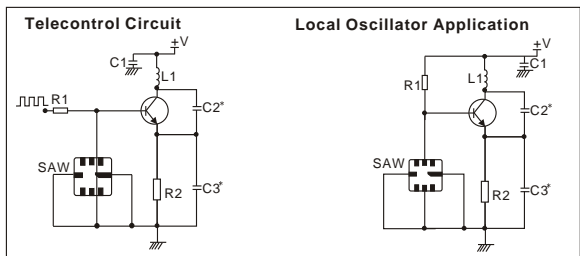
DIMENSIONS



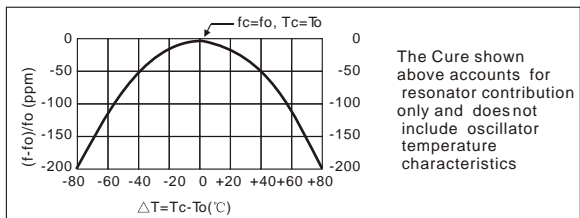
EQUIVALENT LC MODEL AND TEST CIRCUIT



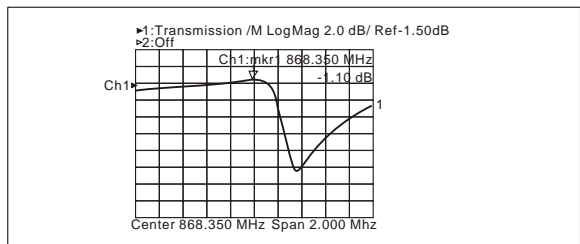
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in T/R: 3000pcs/Reel, 2Reel/box, 5box/Carton  
 See page 182 for detail dimensions

