

FEATURES

- The SR433.92 -M3 is a true one-port, Surface-acoustic-wave(SAW) resonator in a low-profile, M3 case. It provides reliable, fundamental-mode, quartz frequency stabilization of fixed-frequency transmitters operating at 433.920MHz.

APPLICATIONS

- Remote Control

SPECIFICATION *

Parameters		Product	Option Code
		SR	SR
Centre Frequency(f_c) :	433.92MHz	▲	433.92
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 433.92 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):	10,500	▲
	50Ω Loaded Q(Q_L):	1,450	▲
DC Insulation Resistance between Any Two Pins:		1.0MΩ Min.	▲
Frequency Aging Absolute Value During the First Year(f_A):		≤ 10 ppm/year	▲
RF Equivalent RLC Model	Motional Resistance(R_m):	26Ω Max.	▲
	Motional Inductance(L_m):	61.724 μH	▲
	Motional Capacitance(C_m):	2.1817 fF	▲
	Shunt Static Capacitance (C_o):	2.5 pF Max.	▲
CW Therefore Power Dissipation:		+10dBm	▲
DC Voltage Between Any Two Pins:		± 30 V 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

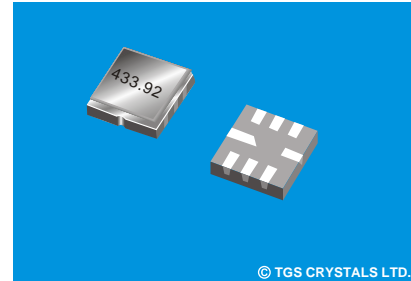
NOTE

1. Electrostatic Sensitive Device. Observe precautions for handling
2. Freq. aging is the change in f_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 center freq., f_c , is measured at the minimum insertion loss point, IL_{min} , with the resonator in the 50Ω test system (VSWR $\leq 1.2:1$). Typically, $T_{oscillator}$ or $f_{transmitter}$ is appr. equal to the resonator f_c .
4. Typically, equipment utilizing this device requires emissions 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: 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: $f = f_o [1 - FTC (T - T_o)^2]$. Typically, oscillator T_o is appr. equal to the specified resonator T_o .

PART NUMBER GUIDE

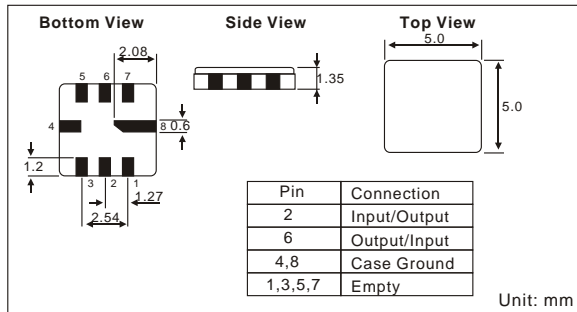
TGS	SR	433.92	A	M3	T
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 433.920 A M3 T

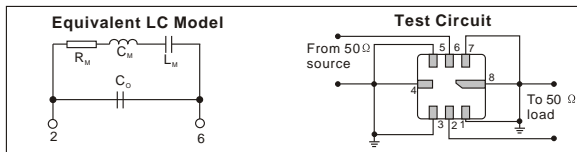


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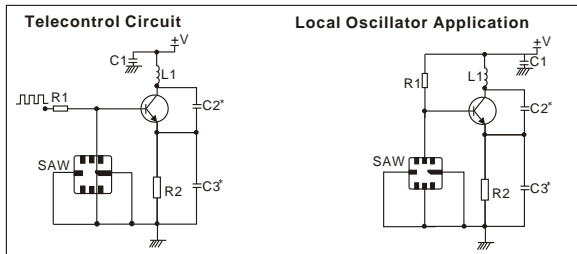
DIMENSIONS



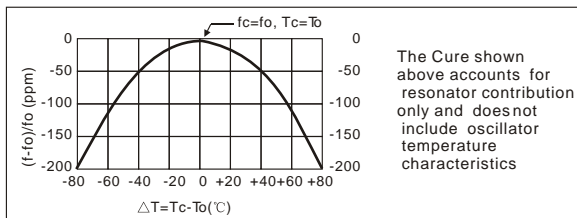
EQUIVALENT LC MODEL AND TEST CIRCUIT



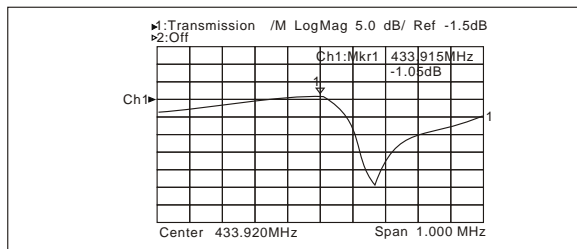
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

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

