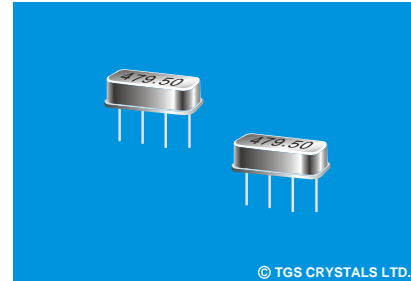


FEATURES

- The SR479.5-F is a true one-port, Surface-acoustic-wave(SAW) resonator in a low-profile, F-11 case. It provides reliable, fundamental-mode, quartz frequency stabilization of fixed-frequency LOS Operating at 479.5MHz

APPLICATIONS

- Communication



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SPECIFICATION \*

Parameters		Product	Option Code
		SR	SR
Centre Frequency( $f_c$ ) :	479.500MHz	▲	479.500
Frequency Tolerance( $\Delta f_c$ ):	$\pm 150$ KHz	$\Delta$	C
	$\pm 200$ KHz	$\Delta$	D
	$\pm 250$ KHz	$\Delta$	E
Temp. Stability	Turnover Temp( $T_o$ ): 54°C Max.	▲	
	Turnover Frequency( $f_o$ ): $f_c$ 479.5 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( $Q_u$ ): 12,800	▲	
	50 $\Omega$ Loaded Q( $Q_L$ ): 2,000	▲	
DC Insulation Resistance between Any Two Pins:	1.0M $\Omega$ Min.	▲	
Frequency Aging Absolute Value During the First Year( $f_a$ ):	$\leq 10$ ppm/year	▲	
RF Equivalent RLC Model	Motional Resistance( $R_m$ ): 26 $\Omega$ Max.	▲	
	Motional Inductance( $L_m$ ): 88.7856 $\mu$ H	▲	
	Motional Capacitance( $C_m$ ): 1.24085 fF	▲	
	Shunt Static Capacitance ( $C_o$ ): 1.75 pF	▲	
CW Therefore Power Dissipation:	+10dBm	▲	
DC Voltage Between Any Two Pins:	$\pm 30$ V DC	▲	
Case Temperature:	-40°C~+85°C	▲	
Holder Type:	F-11	$\Delta$	F
Package:	Tube	$\Delta$	U

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

NOTE

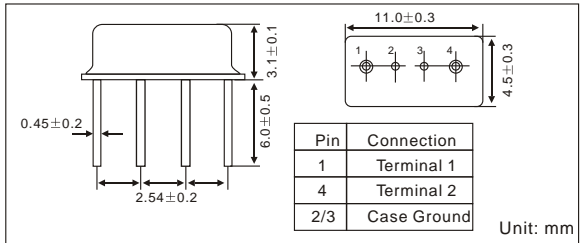
- 1: Electrostatic Sensitive Device. Observe precautions for handling
- 2: Freq. Aging is the change in  $f_c$  with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temp. Above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
- 3: The centre freq.  $F_c$ , is the freq. Of minimum IL with the resonator in the specified test fixture in a 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 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:  $f = f_o [1 - FTC (T_c - T_o)^2]$ . Typically, oscillator  $T_o$  is 20°C less than the specified resonator  $T_o$ .

PART NUMBER GUIDE

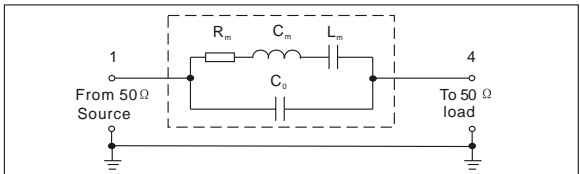
TGS	SR	479.5	C	F	U
Mark	SAW Resonators One-Port	Centre Freq.	Frequency Tolerance	Holder Type	Package

e.g. TGS SR 479.5 C F U

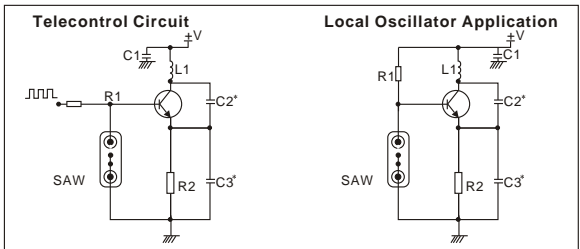
DIMENSIONS



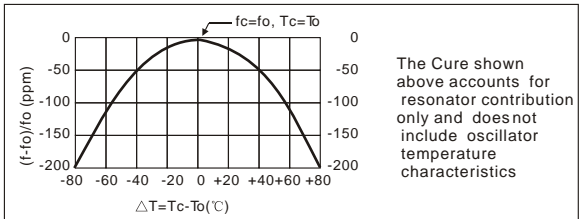
EQUIVALENT LC MODE



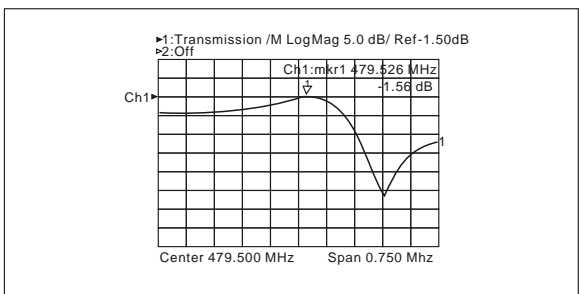
TYPICAL APPLICATION CIRCUIT



TEMPERATURE CHARACTERISTICS



TYPICAL FREQUENCY RESPONSE



PACKAGE

- Standard package in Tube: 20pcs/Tube.

