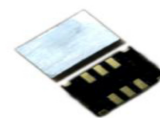


Temperature Compensated Crystal Oscillators



SINEWAVE HIGH FREQUENCY TCXO IN SMD PACKAGE – TC149S Series

SPECIFICATIONS

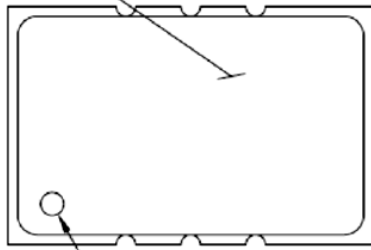
Part Number	TC149S-100.000MHz
Frequency	100MHz
Temperature Range	-40°C to +85°C
Frequency Stability vs Temp.	±0.28 ppm Maximum
Nominal Frequency Tolerance	±1 ppm Maximum Frequency at 25°C, before reflow
Supply Voltage (Vcc)	B = +5.0 V ± 5%
Input Current	35mA Maximum at 25°C
Storage Temperature	-55°C to +95°C
Frequency Stability vs Vcc	±0.1 ppm Maximum / Vcc ±5%
Frequency Stability vs Load	±0.1 ppm Maximum / load change ±10%
Aging	±1 ppm Maximum first year at 25°C ±2 ppm Maximum 10 years at 25°C
G sensitivity	1.0 ppb/G Maximum Condition: In all axes, 10-2000Hz
Phase Noise (100MHz Typ)	-90 dBc/Hz at 10Hz -120 dBc/Hz at 100Hz -142 dBc/Hz at 1KHz -155 dBc/Hz at 10KHz -162 dBc/Hz at 100KHz -165 dBc/Hz at 1MHz
Output Waveform	SINEWAVE
Output Power	10 dBm
Output Load	50 Ohm
Harmonic Attenuation	-30 dB Minimum
Spurious Attenuation	-80 dB Minimum
Start time	2.0 ms Maximum

Environmental and Mechanical

Parameter	Specification
Mechanical Shock	Per MIL-STD-202, Method 213, Condition E
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
Vibration	Per MIL-STD-883, Method 2007, Condition A
Soldering Conditions	260°C for 10s max
Hermetic Seal	Leak rate less than 5×10^{-8} atm.cc/s of helium (crystal only)

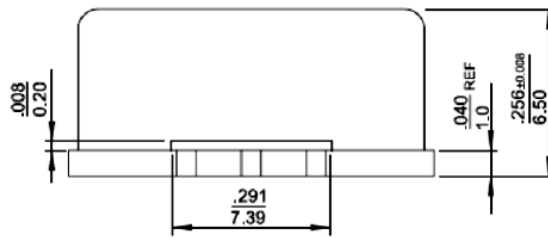
OUTLINE DRAWING

MARKING THIS SURFACE

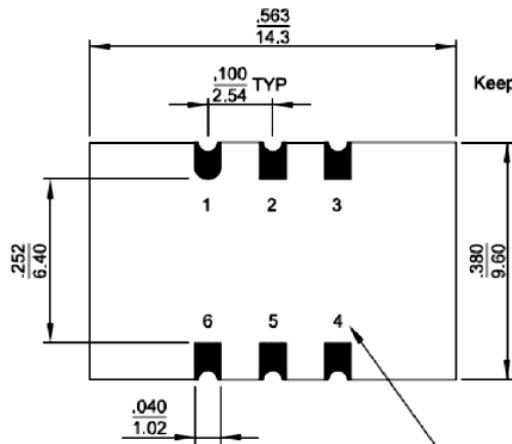


PIN 1 SYMBOL

(VIEW FROM TOP)

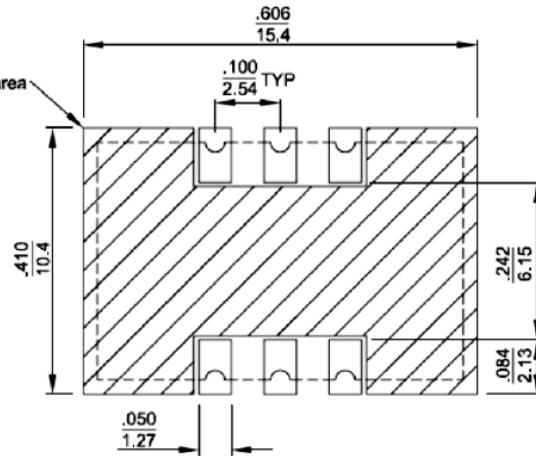


RECOMMENDED SOLDER PAD LAYOUT



Numbers for reference only (Not stamped on unit)

(VIEW FROM BOTTOM)



Pin Connections

- #1 N/C #2 N/C #3 GND
- #6 VDD #5 N/C #4 Output

$\frac{\text{INCH}}{\text{mm}}$ (REFERENCE ONLY)

Maximum solder reflow profile

