

ISSUE 5; October 2023

Description

- Surface mount temperature compensated crystal oscillator (TCXO) providing a high degree of frequency stability over a wide temperature in a hermetically sealed ceramic package and is suitable for GPS applications

Frequency Parameters

- Frequency: 16.32MHz to 33.6MHz
- Frequency Stability: ± 0.50 ppm
- Ageing: ± 1 ppm typical in 1st year @25°C

Electrical Parameters

- Supply Voltage: 3.0V $\pm 10\%$
- Current Draw (Typical): 2mA @ 20MHz
- Supply Voltage Variation: ± 0.2 ppm
- Load Variation: ± 0.2 ppm (10k Ω // 10pF)
After Reflow: ± 1.0 ppm

Operating Temperature Ranges

- 40 to 85°C

Output Details

- Output Compatibility: Clipped Sine
- Drive Capability: 10k Ω // 10pF
- Output Waveform: 0.8 Vpk-pk min, DC-Coupled

Environmental Parameters

- Shock: IEC 60068-2-27, Test Ea: 980m/s² acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz 1.5mm displacement, 60-2000Hz at 98.1m/s², 30mins in 3 mutually perpendicular planes at 1 oct/min
- Solderability: MIL-STD-202, Method 208, Category 3
- Storage Temperature Range: -55 to 125°C

Manufacturing Details

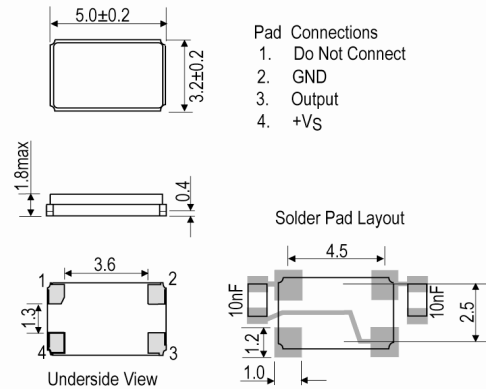
- Soldering: Suitable for Convection Reflow soldering. Peak temperature 260°C for 10sec max
- Washing: Able to withstand aqueous washing
- RoHS Terminations: NiCoAu
- RoHS Reflow: 260degC 10s

Ordering Information

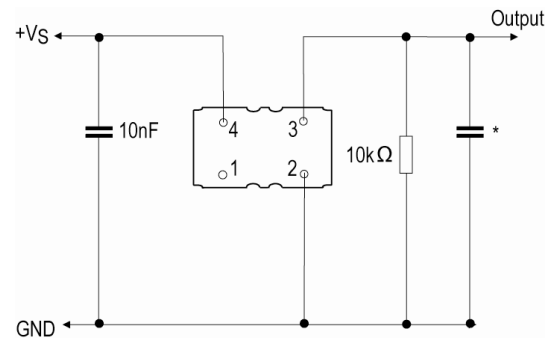
- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Example
26.0MHz CFPT-127
Clipped Sine ± 0.5 ppm -40 to 85C 3V



Outline (mm)



Test Circuit



*10k Ω // 10pF (Clipped Sinewave), inclusive of probe and jig capacitance.

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Compliance

- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): 3

Packaging Details

- Pack Style: Cutt In tape, cut from a reel
Pack Size: 100
- Pack Style: Bulk Loose in bulk pack
Pack Size: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

Electrical Specification - maximum limiting values 3.0V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
16.32MHz	16.32MHz	-40 to 85	±0.5	-	-	-
16.8MHz	16.8MHz	-40 to 85	±0.5	-	-	-
19.2MHz	19.2MHz	-40 to 85	±0.5	-	-	-
24.5535MHz	24.5535MHz	-40 to 85	±0.5	-	-	-
26.0MHz	26.0MHz	-40 to 85	±0.5	-	-	-
33.6MHz	33.6MHz	-40 to 85	±0.5	-	-	-

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