ISSUE 7; January 2015 - RoHS 2011/65/EU

Description

- Surface mount temperature compensated voltage controlled crystal oscillator (TCVCXO) in a hermetically sealed ceramic package

Frequency Parameters

- Frequency 10.0MHz to 26.0MHz
- Frequency Tolerance ±0.50ppm
- Frequency Stability ±1.50ppm to ±5.00ppm
- Ageing ±1ppm typ in 1st year @ 25°C
- Supply Voltage Variation (@ ±5% change): ±0.2ppm max
- Load Variation (@ ±10% change): ±0.2ppm max

Electrical Parameters

- Supply Voltage 3.0V ±0.3V

Frequency Adjustment

- Pulling ±5ppm min
- Control Voltage 1.5V ±1.0V
- Input Impedence 1MΩ
- Frequency movement is positive sense
- Input Impedance (Pad 1): 1.0MΩ min

Operating Temperature Ranges

- 0 to 50°C
- -10 to 60°C
- -20 to 70°C
- -30 to 80°C
- -30 to 85°C
- -40 to 85°C

Output Details

- Output Compatability Clipped Sine
- Drive Capability 10kΩ//10pF ±10%
- Output Level: 0.8Vpk-pk minimum

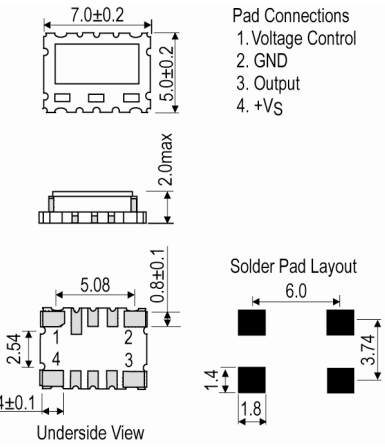
Noise Parameters

- Phase Noise (typical @ 10MHz):
  -90dBc/Hz @ 10Hz
  -110dBc/Hz @ 100Hz
  -140dBc/Hz @ 1kHz
  -145dBc/Hz @ 10kHz

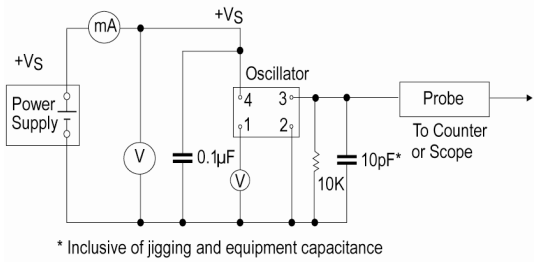
Environmental Parameters

- Storage Temperature Range: –55 to 125°C
- Shock: MIL-STD-883D, Method 2002.3, Test Condition B: 1500G, 0.5ms, 1/2 sine wave, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: MIL-STD-883D, Method 2005.2, Test Condition B: 20G (20Hz-2000Hz), 1.5mm amplitude, in 3 mutually perpendicular planes, 4hrs in each plane

Outline (mm)



Test Circuit



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Ordering Information

- Frequency*
  Model*
  Output
  Frequency Stability (over operating temperature range)*
  Operating Temperature Range*
  Supply Voltage
- Example
  13.0MHz CFPT-123
  Clipped Sine ±2.5ppm -30 to 80C 3.0V

Compliance

- RoHS Status Compliant
- REACh Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

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

Electrical Specification - maximum limiting values 3.0V ±0.3V

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
10.0MHz	26.0MHz	0 to 50	±1.5	2.5	-	-
		-10 to 60	±1.5	2.5	-	-
		-20 to 70	±2.0	2.5	-	-
		-30 to 85	±2.0	2.5	-	-
		-40 to 85	±2.5	2.5	-	-

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