

ISSUE 4; July 2021

Description

- Standard 3.2 x 2.5mm Voltage Controlled Crystal Oscillator (VCXO)
Ceramic package with a seam sealed metal lid, hermetically sealed

Frequency Parameters

- Frequency 6.0MHz to 54.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$

Electrical Parameters

- Supply Voltage 3.3V $\pm 5\%$
- Start Up Time: 10ms max

Frequency Adjustment

- Pulling $\pm 80\text{ppm}$ min
- Control Voltage 1.65V $\pm 1.65\text{V}$
- Input Impedance 1M Ω min
- Linearity: $\pm 10\%$ max, positive slope
- Modulation Bandwidth: 20kHz min

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF max

Noise Parameters

- Phase Noise (typical @ 21.25MHz)
 - 60dBc/Hz @ 10Hz
 - 90dBc/Hz @ 100Hz
 - 125dBc/Hz @ 1kHz
 - 145dBc/Hz @ 10kHz
 - 150dBc/Hz @ 100kHz

Environmental Parameters

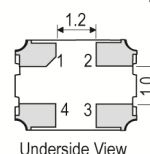
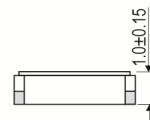
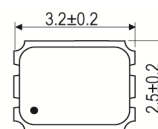
- Storage Temperature Range: -40 to 85°C
- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

Manufacturing Details

- RoHS Terminations NiAu
- RoHS Reflow 260degC 10s

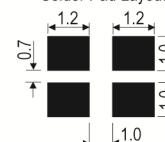


Outline (mm)



Pad Connections
 1. Voltage Control
 2. GND
 3. Output
 4. +Vs

Solder Pad Layout



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Ordering Information

- Frequency*
Model*
Output
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Supply Voltage
Pullability
(*minimum required)
- Example
10.0MHz CFPV-115
HCMOS ±50ppm -40 to 85C 3.3V ±80ppm min

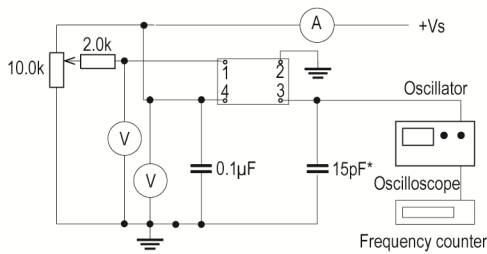
Compliance

- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

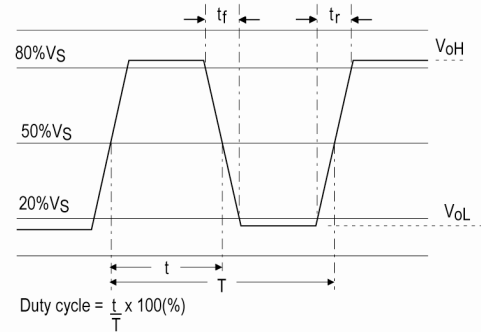
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000
- Pack Style: Cutt In tape, cut from a reel
Pack Size: 100

Test Circuit



*Inclusive of jigging and equipment capacitance

Wave Form



Electrical Specification - maximum limiting values 3.3V ±5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
6.0MHz	30.0MHz	-10 to 70	±25.0	15	5	40/60%
		-40 to 85	±25.0	15	5	40/60%
30.000001MHz	54.0MHz	-10 to 70	±25.0	25	5	40/60%
		-40 to 85	±25.0	25	5	40/60%

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