

ISSUE 1; February 2017

Description

- LVPECL output Voltage Controlled Crystal Oscillator
- Ceramic package with a hermetically sealed metal lid

Frequency Parameters

- Frequency: 80.0MHz to 622.08MHz
- Frequency Stability: $\pm 20.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 3\text{ppm}$ max per year

Electrical Parameters

- Supply Voltage: 3.3V $\pm 5\%$

Frequency Adjustment

- Pulling: $\pm 100\text{ppm}$ min
- Control Voltage: 1.65V $\pm 1.35\text{V}$
- Input Impedance: (pin1) $> 2\text{M}\Omega$
- Linearity: $\pm 10\%$ max

Operating Temperature Ranges

- 0 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: LVPECL
- Drive Capability: 50Ω in VS-2.0V
- VoH: VS-1.025V max
- VoL: VS-1.620V max

Output Control

- Tri-State Function (pin2):
Enable: $> 70\%$ VS or no connection
Disable: $< 30\%$ VS
- Start Up Time: 10ms max

Noise Parameters

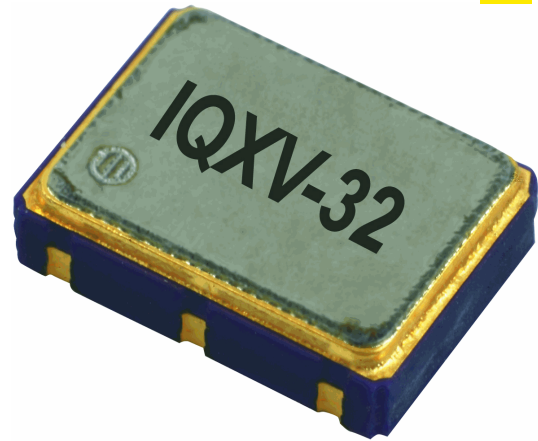
- Phase Jitter (12kHz to 20MHz): 4ps max

Environmental Parameters

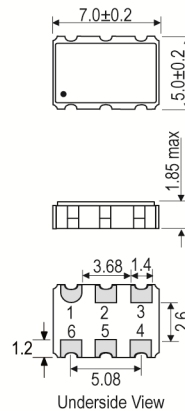
- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202, Method 213
- Vibration: MIL-STD-883, Method 2007

Ordering Information

- Frequency*
- Model*
- Output
- Frequency Stability*
- Operating Temperature Range*
- Supply Voltage
- Pullability
- (*minimum required)
- Example
- 200.0MHz IQXV-32
- LVPECL $\pm 50\text{ppm}$ -40 to 85C 3.3V $\pm 100\text{ppm}$ min

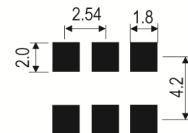


Outline (mm)

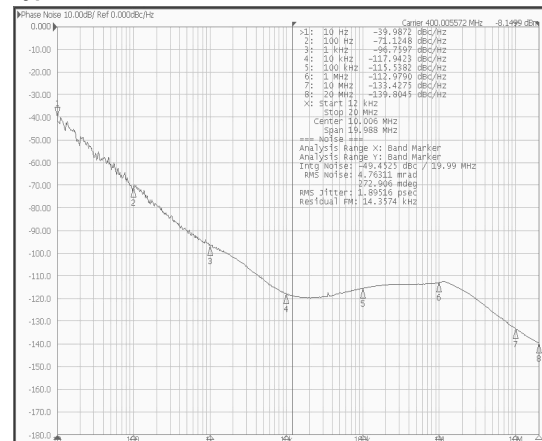


- Pad Connections
- Voltage Control
 - Tri-State Operation
 - GND
 - Output +
 - Output -
 - +VS

Solder Pad Layout



Typical Phase Noise Plot



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Compliance

- RoHS Status (2011/65/EU) Compliant
- REACh Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 1
- Pack Style: Reel Tape and Reel in accordance with
Pack Size: 1,000 EIA-481D

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	%
80.0MHz	622.08MHz	0 to 70	±20.0	100	1	45/55%
		-40 to 85	±50.0	100	1	45/55%

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