

ISSUE 4; April 2016

Description

- High frequency 3.3V surface mount oscillator in a ceramic package, with a hermetically sealed metal lid and LVDS outputs



Frequency Parameters

- Frequency: 12.0MHz to 800.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$

Electrical Parameters

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

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: LVDS
- Drive Capability: 100Ω
- Differential Output Voltage (VOD): 0.33V typ
- Offset Voltage (Vos): 1.25V typ

Output Control

- Enable/Disable Operation:
 - Logic '0' to pad 2 (<1.7V) enables oscillator outputs
 - Logic '1' to pad 2 (>2.2V) disables oscillator outputs; when disabled the oscillator outputs go to the high impedance state
 - No connection to pad 2 enables oscillator outputs

Noise Parameters

- Phase Jitter(12kHz to 20MHz): 5ps rms max
- Phase Noise (max): -110dBc/Hz @ 10kHz

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)

Ordering Information

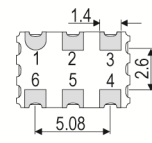
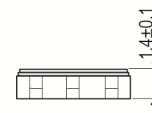
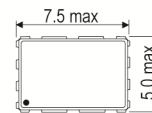
- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- (*minimum required)
- Example:
 - 100.0MHz CFPS-63
 - LVDS $\pm 100\text{ppm}$ -10 to 70C 3.3V

Compliance

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



Outline (mm)

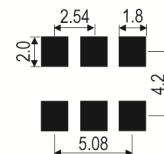


Underside View

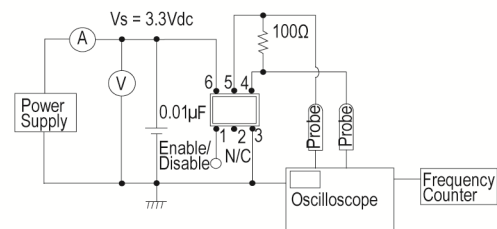
Pad Connections

- N/C
- Enable/Disable
- GND
- Output 1
- Output 2
- +Vs

Solder Pad Layout



Test Circuit



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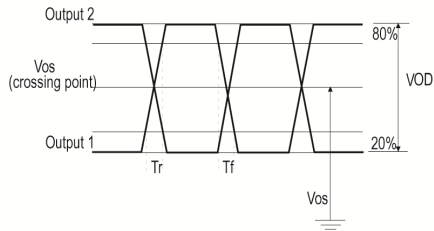
Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

Packaging Details

- 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

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	%
12.0MHz	800.0MHz	-10 to 70	±25.0	80	1	45/55%
		-40 to 85	±50.0	80	1	45/55%

This document was correct at the time of printing; please contact your local sales office for the latest version.
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