

ISSUE 3; March 2016

Description

- 5.0 x 3.2mm surface mount voltage controlled crystal oscillators (VCXOs) in a hermetically sealed ceramic package



Frequency Parameters

- Frequency: 2.0MHz to 52.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Modulation Bandwidth: $>20\text{kHz}$
- Linearity $\pm 10\%$ Positive

Electrical Parameters

- Supply Voltage: 5.0V $\pm 5\%$

Frequency Adjustment

- Pulling: $\pm 100\text{ppm}$ min
- Control Voltage: 2.5V $\pm 2.0\text{V}$
- Input Impedence: 100k Ω typ

Operating Temperature Ranges

- 10 to 70°C

Output Details

- Output Compatability: HCMOS
- Drive Capability: 15pF max
- Logic '1' ($>70\%V_s$) to pad 6 enables oscillator output
Logic '0' ($<30\%V_s$) to pad 6 disables oscillator output; when disabled the oscillator output goes into high impedance state
No connection to pad 6 enables oscillator output

Noise Parameters

- Phase Noise (max):
 - 65dBc/Hz @ 10Hz
 - 98dBc/Hz @ 100Hz
 - 125dBc/Hz @ 1kHz
 - 135dBc/Hz @ 10kHz
 - 145dBc/Hz @ 100kHz

Environmental Parameters

- Storage Temperature Range: -40 to 85°C

Ordering Information

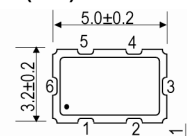
- Frequency*
Model*
Output
Frequency Stability (over operating temperature range)*
Operating Temperature
Supply Voltage
Pullability
- Example
3.0MHz CFPV-60
HCMOS $\pm 100\text{ppm}$ -10 to 70C 5.0V $\pm 100\text{ppm}$ min

Compliance

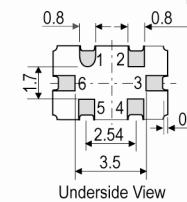
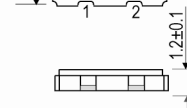
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



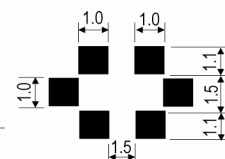
Outline (mm)



- Pad Connections
- Voltage Control
 - GND
 - GND or N/C
 - Output
 - +Vs
 - Enable/Disable



Solder Pad Layout



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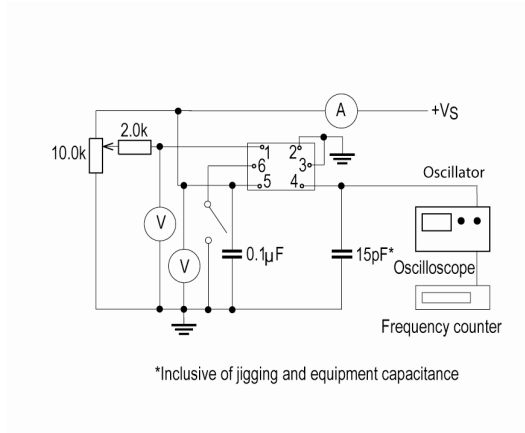
Email: info@iqdfrequencyproducts.com

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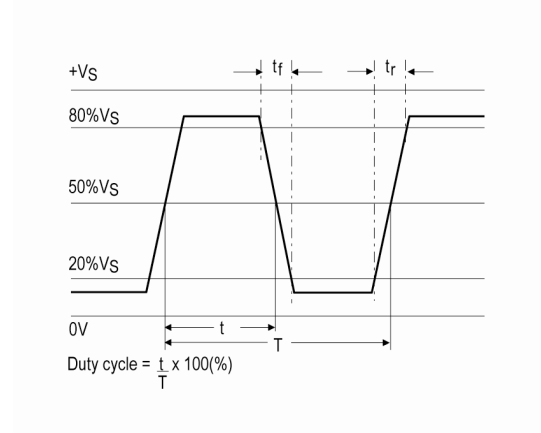
Packaging Details

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

Test Circuit



Wave Form



Electrical Specification - maximum limiting values 5.0V ±5%

| Frequency Min | Frequency Max | Temperature Range | Stability (Min) | Current Draw | Rise and Fall Time | Duty Cycle |
|---------------|---------------|-------------------|-----------------|--------------|--------------------|------------|
| | | °C | ppm | mA | ns | % |
| 2.0MHz | 30.0MHz | -10 to 70 | ±25.0 | 15 | 5 | 40/60% |
| 30.000001MHz | 52.0MHz | -10 to 70 | ±25.0 | 25 | 5 | 40/60% |

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