

ISSUE 4; July 2016

### Description

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



### Frequency Parameters

- Frequency: 75.0MHz to 270.0MHz
- Frequency Stability:  $\pm 25.00\text{ppm}$  to  $\pm 100.00\text{ppm}$

### Electrical Parameters

- Supply Voltage: 3.3V  $\pm 5\%$
- Standby Current: 30 $\mu\text{A}$  max
- Start-Up Time: 10ms max

### Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

### Output Details

- Output Compatibility: LVDS
- Drive Capability: 100 $\Omega$
- Differential Output Voltage (Vod): 0.33V typ
- Offset Voltage (Vos): 1.25V typ

### Output Control

- Enable/Disable Operation:
  - Logic '1' to pad 1 (70%Vs min) enables oscillator output
  - Logic '0' to pad 1 (30%Vs max) disables oscillator output; when the oscillator output goes to the high impedance state
  - No connection to pad 1 enables oscillator output

### Noise Parameters

- Phase Jitter (12kHz to 20MHz): 1ps rms max

### Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Drop: natural drop, 3 times from 30cm onto a hard wooden plate
- Vibration: 10 to 55Hz (amplitude 1.52mm), 20G, X, Y and Z (2 hours each, total 6 hours)

### Ordering Information

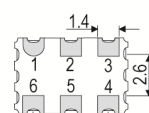
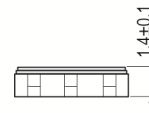
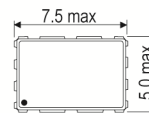
- Ordering Information (minimum required):
  - Frequency\*
  - Model\*
  - Output
  - Frequency Stability\*
  - Operating Temperature Range\*
  - Supply Voltage
- Example:
  - 100.0MHz CFPS-60
  - LVDS  $\pm 100\text{ppm}$  -10 to 70C 3.3V

### Compliance

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



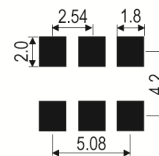
### Outline (mm)



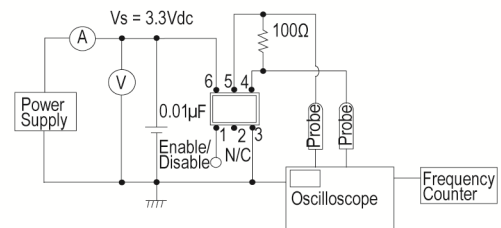
Underside View

- Pad Connections
1. Enable/Disable
  2. N/C
  3. GND
  4. Output 1
  5. Output 2
  6. +Vs

### Solder Pad Layout



### Test Circuit



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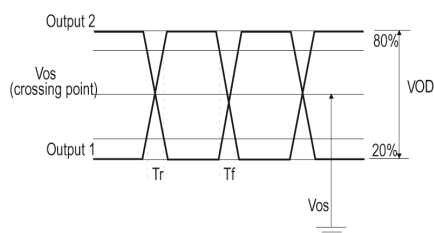
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### Packaging Details

- 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
- Pack Style: Cutt      Cut tape  
Pack Size: 1

### 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	%
75.0MHz	270.0MHz	-10 to 70	±25.0	66	0.7	45/55%
		-40 to 85	±50.0	66	0.7	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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