

**< 1 ps Phase Jitter!**

**5032 Packages!**

**IDT MEMS Oscillator 212.50 MHz LVDS**

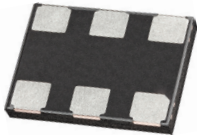
**IDT MEMS Oscillator 156.25 MHz LVPECL**

- Low Jitter
- Low Cost
- Fast Lead Times
- Standard Packages

## BENEFITS / FEATURES

- **Short lead times**
  - Enables Just-In-Time inventory management
- **Standard differential outputs**
  - LVDS, LVPECL
- **Standard package sizes**
- **Low Phase Jitter**
  - < 1.0 ps rms (12 kHz to 20 MHz)
- **± 50 ppm Frequency Stability**
- **Shock and vibration resistant**
- **Up to 40x higher reliability than Quartz**

[www.idt.com/go/MEMS](http://www.idt.com/go/MEMS)

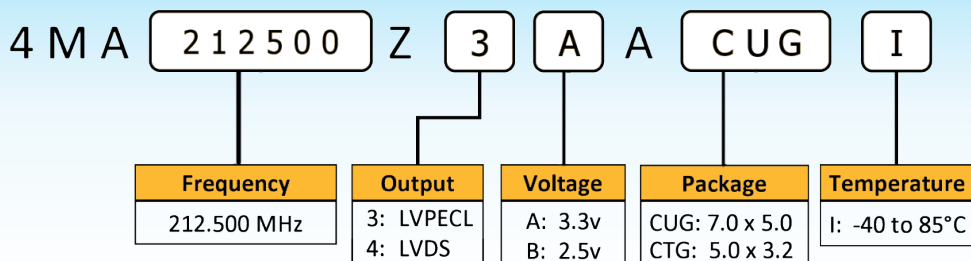
| LVDS<br>LVPECL      | <br>5032 | <br>7050 |
|---------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Package Size        | 5.0 x 3.2 mm                                                                                 | 7.0 x 5.0 mm                                                                                  |
| Supply Voltage      | 2.5 or 3.3 V                                                                                 | 2.5 or 3.3 V                                                                                  |
| Frequency Range     | 50 MHz ~ 625 MHz                                                                             | 50 MHz ~ 625 MHz                                                                              |
| Frequency Stability | ± 50 ppm                                                                                     | ± 50 ppm                                                                                      |
| Temperature Range   | -40 to +85°C                                                                                 | -40 to +85°C                                                                                  |

## Standard Frequencies (MHz)

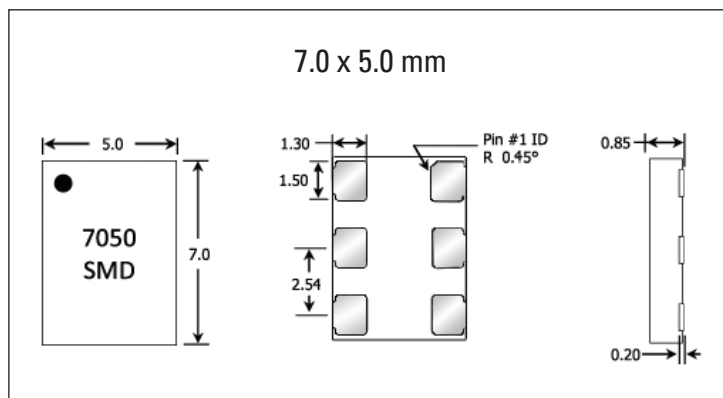
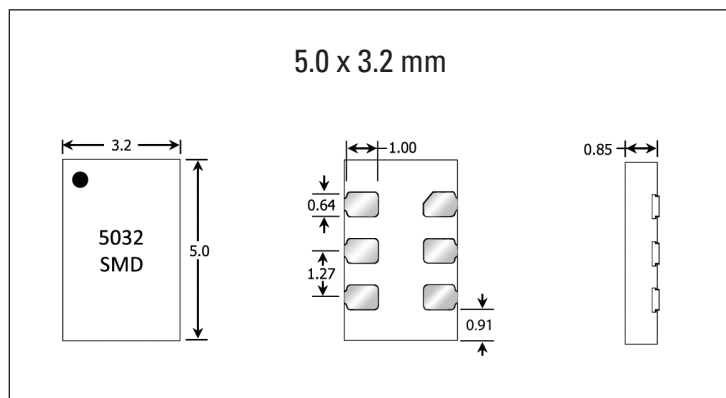
|         |        |         |        |       |       |        |        |
|---------|--------|---------|--------|-------|-------|--------|--------|
| 100     | 106.25 | 125     | 133.33 | 148.5 | 150   | 155.52 | 156.25 |
| 159.375 | 160    | 161.133 | 187.5  | 200   | 212.5 | 250    | 312.5  |

ADDITIONAL CUSTOM FREQUENCIES AVAILABLE UPON REQUEST

## PART ORDERING GUIDELINE



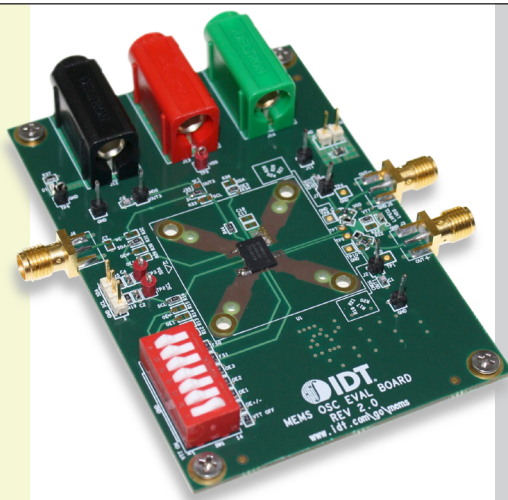
## PACKAGE OUTLINE AND DIMENSIONS



## MEMS OSCILLATOR EVALUATION BOARD

### FEATURES

- Differential SMA output
- Standard banana plug power connectors
- Available in standard 5032 and 7050 size packages
- Selectable output termination for both LVDS and LVPECL
- Switch control for Output Enable (OE)



The MEMS Oscillator Evaluation Board is designed to provide a convenient platform to quickly evaluate the performance and operation of IDT's family of MEMS oscillators. The board includes provisions for LVPECL and LVDS termination and can also be configured to terminate directly into a 50  $\Omega$  oscilloscope. For VTT terminated LVPECL, a separate bias voltage (VDD - 2V) is also generated onboard for measurement convenience.

## TECHNICAL SUPPORT

EMAIL: [MEMS\\_Support@idt.com](mailto:MEMS_Support@idt.com)

WEBSITE: [www.idt.com/go/MEMS](http://www.idt.com/go/MEMS)



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