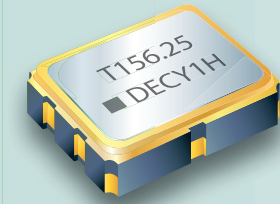


# SMD LVDS Crystal Oscillators - Differential Output

## 3.2 x 2.5 x 0.95 mm DE Series



### Features

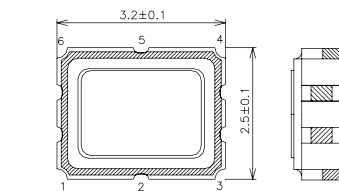
- Fundamental solution.
- 3.3V and 2.5V operation available.
- LVDS output, output frequencies 25 MHz to 200 MHz.
- Excellent low phase noise and jitter.
- Tri-State function available.
- Applications : Fibre Channel, Gigabit Ethernet, Serial ATA, Serial Attached SCSI, PCI-Express, SDH/SONET.
- RoHS Compliant / Pb Free.

### Electrical Specifications

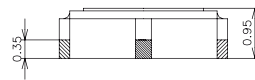
| Item / Type                                    | DE   |
|--|--|
| Output Type                                    | LVDS   |
| Output Load                                    | 100 Ω  |
| Oscillation Mode                               | Fundamental                                  |
| Supply Voltage                                 | 2.5 V , 3.3 V                                |
| Frequency Range                                | 25 ~ 200 MHz                                 |
| Overall Frequency Stability *                  | ± 50 ppm , or specify                        |
| Operating Temperature Range                    | - 10 ~ + 70 °C , - 40 ~ + 85 °C , or specify |
| Storage Temperature Range                      | - 55 ~ + 125 °C                              |
| Voltage Vol ( Min. ) / Voh ( Max. )            | 0.9 V / 1.6 V                                |
| Rise ( Tr ) / Fall ( Tf ) Time ( 20 % ~ 80 % ) | 1 nS Max.                                    |
| Supply Current                                 | 80 mA Max.                                   |
| Symmetry                                       | 45 ~ 55 %                                    |
| Start-up Time                                  | 10 mS Max.                                   |
| Phase Jitter ( 12 KHz ~ 20 MHz )               | 1 pS Max.                                    |

\* Inclusive of frequency tolerance at 25 °C, variation over temperature, supply voltage variation, aging and vibration.

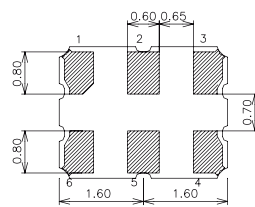
### Dimensions



Top View



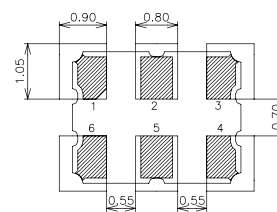
Side View



Bottom View

#### PAD FUNCTION:

- 1: ENABLE CONTROL or NC
- 2: ENABLE CONTROL or NC
- 3: GND
- 4: OUT
- 5: OUTN
- 6: VDD



Top View Suggested Layout

Units: mm