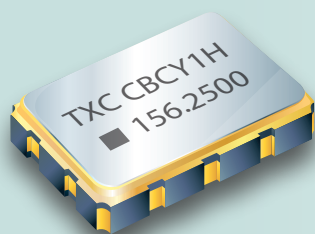


# SMD LVPECL Crystal Oscillators - Differential Output

## 5.0 x 3.2 x 1.2 mm CB Series



### Features

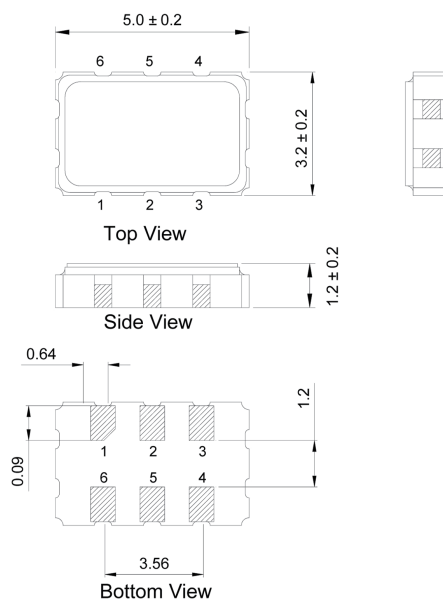
- 3rd overtone solution.
- 3.3V and 2.5V operation available.
- LVPECL output, output frequencies 25 MHz to 200 MHz.
- Excellent low phase noise and jitter.
- Tri-state function available.
- Applications : Fibre Channel, Gigabit Ethernet, Serial ATA, Serial Attached SCSI, PCI-Express, SDH/SONET.
- RoHS compliant / Pb Free.

### Electrical Specifications

| Item / Type                                    | CB                                                              |
|------------------------------------------------|-----------------------------------------------------------------|
| Output Type                                    | LVPECL                                                          |
| Output Load                                    | 50 $\Omega$ to VDD - 2 V                                        |
| Oscillation Mode                               | 3rd Overtone                                                    |
| Supply Voltage (VDD)                           | 2.5 V , 3.3 V                                                   |
| Frequency Range                                | 25 ~ 200 MHz                                                    |
| Overall Frequency Stability *                  | $\pm 50$ ppm , or specify                                       |
| Operating Temperature Range                    | -10 ~ + 70 $^{\circ}$ C , - 40 ~ + 85 $^{\circ}$ C , or specify |
| Storage Temperature Range                      | - 55 ~ + 125 $^{\circ}$ C                                       |
| Voltage Vol ( Max.) / Voh ( Min.)              | VDD - 1.62 V / VDD - 1.025 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.                                                       |

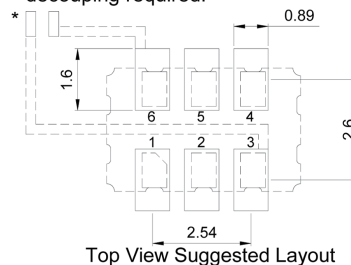
\* Inclusive of frequency tolerance at 25  $^{\circ}$ C , variation over temperature, supply voltage variation, aging and vibration.

### Dimensions



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

\* :External high frequency power supply decoupling required.



Units: mm