

# CERAMIC SMD TYPE

# SCO-10

- Ceramic SMD package
- 1.8 / 2.5 / 3.3 / 5.0 supply voltage
- HCMOS output
- Stability to  $\pm 20\text{ppm}$
- Tri-state function available
- Reflow soldering is possible
- Available on tape and reel

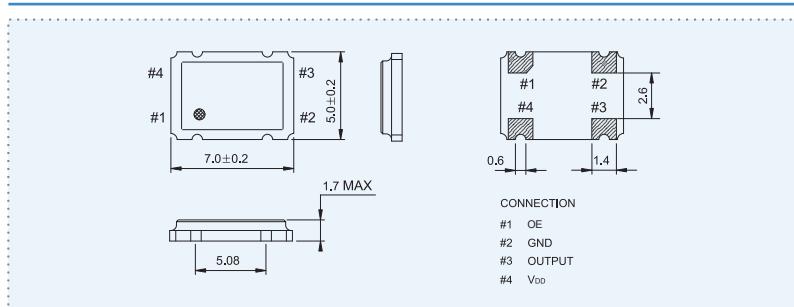


RoHS  
Lead-Free Products

## ELECTRICAL SPECIFICATIONS

|   |  |  |
|---|--|--|
| Frequency Range                             | 1.000 to 40.000MHz(5V), 1.000 to 200MHz(3.3, 2.5, 1.8V)  |  |
| Operating Temperature Range                 | 0 to +70°C or -40 to +85°C   |  |
| Storage Temperature Range                   | -55 to +125°C  |  |
| Frequency Tolerance / Stability             | Inclusive of Operating Temperature Range, Supply Voltage, and Load   |  |
| Supply Voltage(V <sub>DD</sub> )            | 5.0, 3.3, 2.5, 1.8V <sub>Dc</sub> $\pm 10\%$   |  |
| Input Current                               | 1.0000 to 34.999MHz<br>35.000 to 60.000MHz<br>60.001 to 99.999MHz<br>100.000 to 106.250MHz<br>106.251 to 124.999MHz<br>125.000 to 149.999MHz<br>150.000 to 164.999MHz<br>165.000 to 200.000MHz |  |
| Output Voltage Logic High(V <sub>OH</sub> ) | w/HCMOS Load   | 90% of V <sub>DD</sub> min.                      |
| Output Voltage Logic Low(V <sub>OL</sub> )  | w/HCMOS Load   | 10% of V <sub>DD</sub> max.                      |
| Rise / Fall Time                            | 1.000 to 34.999MHz<br>35.000 to 60.000MHz<br>60.001 to 99.999MHz<br>100.000 to 200.000MHz  | 10ns max.<br>8ns max.<br>5ns max.<br>2.5ns max.  |
| Duty Cycle                                  | at 50% of Waveform w/HCMOS Load  | 50 $\pm 10\%$ (STD)<br>50 $\pm 5\%$ (Optional)   |
| Load Drive Capability                       | 15pF HCMOS Load(STD)   |  |
| Output Enable Function                      | V <sub>IH</sub> : $\geq 0.7V_{DD}$<br>V <sub>IL</sub> : $\leq 0.3V_{DD}$   | Enable Output<br>Disable Output : High Impedance |
| Aging (at 25°C)                             | $\pm 3\text{ppm}$ , $\pm 5\text{ppm/year}$ max.  |  |
| Start-up Time                               | 10ms max.  |  |
| Period Jitter : pk-pk                       | $\pm 100\text{ps}$ max.  |  |
| Period Jitter : One Sigma                   | $\pm 25\text{ps}$ max.   |  |
| Phase Jitter(12kHz to 20MHz)                | 1 ps max.  |  |

## MECHANICAL DIMENSIONS



## LAND PATTERN

