

CRYSTAL OSCILLATORS LVPECL



SMEN-531 SERIES

CERAMIC PACKAGE

Applications

- SONET/SDH
- Fiber Channel
- Ethernet

Features

- LVPECL Complementary Output
- Low Phase Jitter (12KHz to 20MHz) Under 1 ps (RMS)
- RoHS Compliant

■ Actual Size:

Specification

MODEL

| | | | |
|---|-----------|---|-----------|
| FREQUENCY RANGE | MHz | 13.500 ~ 156.250 | |
| FREQUENCY STABILITY* | ppm | ± 25 ~ ± 100 | |
| OPERATING TEMPERATURE | °C | - 20 ~ + 70 Or Specify (- 40 ~ + 125 is available) | |
| STORAGE TEMPERATURE | °C | - 55 ~ + 125 | |
| POWER SUPPLY VOLTAGE | VDC | +2.5 ± 5% | +3.3 ± 5% |
| OUTPUT VOLTAGE HIGH (V _{OH}) | V (Min.) | 1.475 | 2.275 |
| OUTPUT VOLTAGE LOW (V _{OL}) | V (Max.) | 1.095 | 1.680 |
| OUTPUT LOAD (Connect to VDC -2V) | Ω | 50 | |
| OUTPUT SYMMETRY | % | 45 ~ 55 | 45 ~ 55 |
| INPUT CURRENT | | | |
| 13.500 ~ 156.250MHz | mA (Max.) | 70 | 70 |
| INPUT VOLTAGE | | | |
| INPUT ENABLE VOLTAGE (V _{IH}) | V (Min.) | 1.75 | 2.31 |
| INPUT DISABLE VOLTAGE (V _{IL}) | V (Max.) | 0.75 | 0.99 |
| RISE / FALL TIME (20% to 80% / 80% to 20% Output Swing) | | | |
| 13.500 ~ 99.999MHz | ns (Max.) | 1.0 | 1.0 |
| 100.000 ~ 156.250MHz | ns (Max.) | 0.5 | 0.5 |
| PHASE JITTER RMS (Fj:12K~20MHz) | ps (Max.) | 1 | |
| AGING | ppm/Year | ± 3 | |

*Inclusive of 25°C±3°C & Operating Temperature Range.

**Specification subject to change without notice.

Pin Connection

| PIN No. | Connection |
|---------|----------------|
| #1 | Enable/Disable |
| #2 | N.C. |
| #3 | GND |
| #4 | Output Q |
| #5 | Output QN |
| #6 | VDC |

Enable/Disable Function

| Pin #1 | Pin #4 & Pin #5 |
|------------|-----------------|
| HIGH(OPEN) | Output |
| LOW | High Impedance |

Dimension(mm)

SMEN-531

