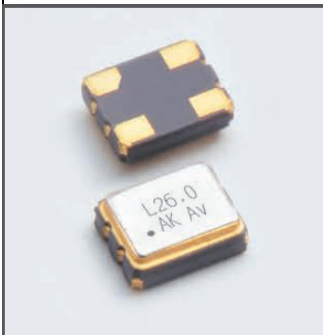


CRYSTAL OSCILLATORS



SMAN-321 SERIES

CERAMIC PACKAGE

Applications

- DVR
- Camera
- Medical
- Industry Control
- Wireless
- Communication
- Telecom
- IoT

Features

- Seam Seal
- Excellent Solderability
- Tri-State
- Low Power Consumption
- RoHS Compliant

Actual Size:

Specification

MODEL

| | | | | | |
|-----------------------|--------------|---|-----------|------------|---------------|
| FREQUENCY RANGE | MHz | 1.000 ~ 54.000 | | | |
| FREQUENCY STABILITY* | ppm | ± 20 ~ ± 100 | | | |
| OPERATING TEMPERATURE | °C | - 20 ~ + 70 Or Specify (- 40 ~ + 125 is available) | | | |
| STORAGE TEMPERATURE | °C | - 55 ~ + 125 | | | |
| POWER SUPPLY VOLTAGE | VDC | +1.8 ± 5% | +2.5 ± 5% | +3.3 ± 10% | +1.62 ~ +3.63 |
| OUTPUT LEVEL | | CMOS | | | |
| OUTPUT SYMMETRY** | % | 40 ~ 60 (at 50% VDC) | | | |
| INPUT CURRENT | | | | | |
| 1.0 ~ 9.9MHz | mA (Max.) | 5 | 6 | 7 | 7 |
| 10.0 ~ 19.9MHz | | 6 | 7 | 7 | 7 |
| 20.0 ~ 31.9MHz | | 6 | 8 | 12 | 12 |
| 32.0 ~ 54.0MHz | | 15 | 20 | 20 | 20 |
| RISE/FALL TIME | | | | | |
| 1.0 ~ 9.9MHz | ns (Max.) | 7 | 5 | 5 | 7 |
| 10.0 ~ 19.9MHz | | 7 | 5 | 5 | 7 |
| 20.0 ~ 31.9MHz | | 6 | 5 | 5 | 6 |
| 32.0 ~ 54.0MHz | | 6 | 5 | 5 | 6 |
| OUTPUT LOAD | | 15 pF Max. | | | |
| AGING | ppm/Year | ± 3 | | | |

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

**Symmetry of 45~55% is available.

***Specification subject to change without notice.

Pin Connection

| PIN No. | Connection |
|---------|----------------|
| #1 | Enable/Disable |
| #2 | GND |
| #3 | Output |
| #4 | VDC |

Enable/Disable Function

| Pin #1 | Pin #3 |
|------------|----------------|
| HIGH(OPEN) | Output |
| LOW | High Impedance |

Dimension(mm)

SMAN-321

