

# 7.5 x 5.0mm LVPECL SMD VCXO Pb-Free & RoHS compliant

## V7A PRELIMINARY

### STABILITY/PULLABILITY

| MODEL    | STABILITY         | PULLABILITY   |
|----------|-------------------|---------------|
| V7A18D1R | ±100ppm/-40~+85°C | ± 130ppm Min. |
| V7A28D1R | ±50ppm/-40~+85°C  | ± 130ppm Min. |
| V7A48D1R | ±25ppm/-40~+85°C  | ± 130ppm Min. |

### OPERATING CONDITIONS

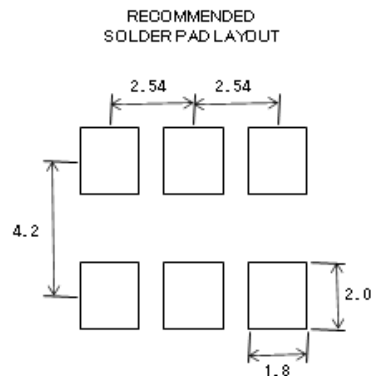
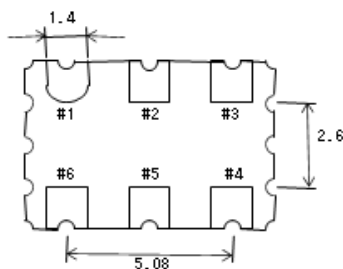
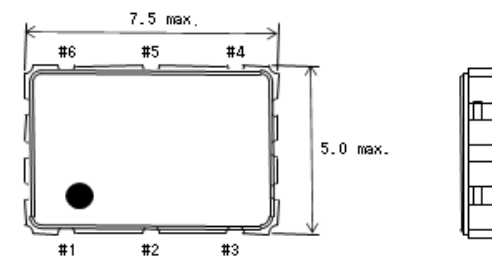
|                         |             |
|-------------------------|-------------|
| Operating Temperature   | -40~+85°C   |
| Storage Temperature     | -55~+125°C  |
| Supply Voltage (Vcc)    | +3.3V±5%    |
| Control Voltage (Vcont) | +1.65V±1.5V |

### ELECTRICAL CHARACTERISTICS (Ta=+25°C, Vcc=+3.3V, Vcont=+1.65V, Vtt=+2.0V, Rt=50Ω)

| PARAMETERS             | CONDITIONS   | V7A□D1R                  |
|------------------------|--|--------------------------|
| Frequency Range (MHz)  |  | 10.000~1000.000          |
| Frequency Stability    | All conditions   | ±25ppm~±100ppm           |
| Controllable Frequency | Vcont = +1.65±1.5V                                     | ±130ppm Min.             |
| Output Voltage (Vol)   | "0" Level (Max.)                                       | 1.7V                     |
| Output Voltage (Voh)   | "1" Level (Min.)                                       | 2.2V                     |
| Rise Time (Tr)         | 20% to 80%Vp-p (< 100MHz)<br>20% to 80%Vp-p (≥ 100MHz) | 1.0nS Max.<br>0.5nS Max. |
| Fall Time (Tf)         | 80% to 20%Vp-p (< 100MHz)<br>80% to 20%Vp-p (≥ 100MHz) | 1.0nS Max.<br>0.5nS Max. |
| Output Load            | Rt<br>Vtt  | 50Ω<br>Vcc-2.0V          |
| Symmetry               | At 50% Vp-p  | 45/55%                   |
| Input Current (Icc)    |  | 60mA Max.                |
| Phase Jitter           | Offset Frequency (12kHz~20MHz)                         | 3ps MAX. (> 40MHz)       |

Note 1: Inclusive of 25°C tolerance, operating temperature range, input voltage change and load change, with Vcont +1.65V.

### DIMENSIONS (mm)



| ENABLE/DISABLE FUNCTION |        |        |
|-------------------------|--------|--------|
| Control (Pin #2)        | Pin #4 | Pin#5  |
| Open                    | Active | Active |
| "1" (VIN ≥ 0.7V)        | Active | Active |
| "0" (VIN ≤ 0.3V)        | High Z | High Z |

| Pin Connection |       |
|----------------|-------|
| #1             | VCONT |
| #2             | E/D   |
| #3             | GND   |
| #4             | OUT 1 |
| #5             | OUT 2 |
| #6             | Vcc   |