

## VD Series : Programmable LVDS Voltage - Controlled Crystal Oscillators 10.000 ~ 1,500.000MHz

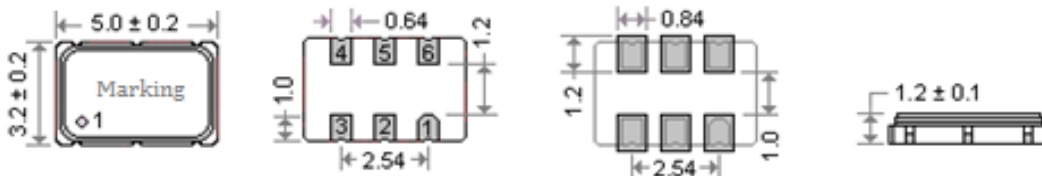
### ● SPECIFICATION

|   |   |
|---|---|
| Frequency Range                         | 10.000 ~ 1,500.000MHz   |
| Input Voltage (V <sub>DD</sub> )        | +2.5V , +3.3V   |
| Frequency stability                     | ±25ppm , ±50ppm , ±100ppm   |
| Operation Temperature                   | -10°C ~ +70°C Typical , (-40°C ~ +85°C Available)                       |
| Storage Temperature Range               | - 55°C ~ + 125°C  |
| Output voltage level (V <sub>OH</sub> ) | 1.60V max.  |
| Output voltage level (V <sub>OL</sub> ) | 0.90V min.  |
| Control Voltage Range (V <sub>c</sub> ) | 1.25±1.0V (V <sub>DD</sub> =2.5V)<br>1.65±1.35V (V <sub>DD</sub> =3.3V) |
| Pulling Range                           | ±30ppm ~ ±200ppm min.   |
| Output Load                             | 100Ω  |
| Start-up Time                           | 10 ms max.  |
| Duty Cycle                              | 45% ~ 55%   |
| Rise / Fall Time                        | 1 ns max.   |
| Current Consumption                     | 65mA max.   |
| Linearity                               | 10% max.  |
| Aging at 25°C                           | ±3.0ppm max. in the 1st year  |
| Tri-state OE (Pad 2)                    | Enable : 70% V <sub>DD</sub> min.<br>Disable : 30% V <sub>DD</sub> max. |

### ● PART NUMBERING

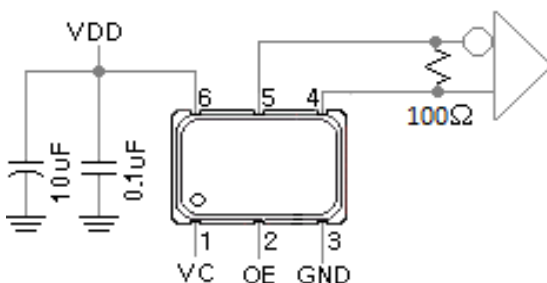
|    |  |                          |   |  |           |  |
|----|--|--------------------------|---|--|-----------|--|
| VD |  |                          |   |  |           |  |
|    | Packing Code   | Input Voltage            | Operation Temperature   | Pulling Range  | Frequency | Stability  |
|    | 756 : 7.0x5.0mm,6P<br>536 : 5.0x3.2mm,6P<br>326 : 3.2x2.5mm,6P | 2.5 : 2.5V<br>3.3 : 3.3V | 1 : -10~+60°C<br>Blank : -10~+70°C<br>2 : -20~+70°C<br>27 : -20~+75°C<br>28 : -20~+85°C<br>3 : -30~+75°C<br>38 : -30~+85°C<br>I : -40~+85°C<br>A : -40~+105°C<br>B : -40~+125°C<br>C : -55~+125°C<br>D : -40~+150°C<br>X : Custom | A : ±30.0PPM<br>B : ±50.0PPM<br>C : ±100.0PPM<br>D : ±200.0PPM | In MHz    | 10 : ±10.0PPM<br>25 : ±25.0PPM<br>50 : ±50.0PPM<br>100 : ±100.0PPM |
|    |  |                          |   |  |           | *  |

### ● DIMENSIONS (mm)



PIN CONNECTIONS  
 PIN 1 : [ Voltage Control ]  
 PIN 2 : [ OE ]  
 PIN 3 : [ Ground ]  
 PIN 4 : [ Differential ]  
 PIN 5 : [ Complementary ]  
 PIN 6 : [ V<sub>DD</sub> ]

### ● TEST CIRCUIT



### ● OUTPUT WAVEFORM

