

**7.5 x 5.0mm 3.3V LVDS
SMD COMPLEMENTARY OUTPUT OSCILLATOR
Pb-Free & RoHS compliant
Enable/Disable control pin#2**

CMD2

FREQUENCY STABILITY

MODEL	FREQUENCY STABILITY
CM1D2A	±100ppm/-10~+70°C
CM2D2A	±50ppm/-10~+70°C
CM3D2A	±25ppm/-10~+70°C
CM1D2R	±100ppm/-40~+85°C
CM2D2R	±50ppm/-40~+85°C
CM3D2R	±25ppm/-40~+85°C

OPERATING CONDITIONS

Operating Temperature	-10~+70°C, -40~+85°C
Storage Temperature	-55~+125°C
Supply Voltage (Vcc)	+3.3V±5%

ELECTRICAL CHARACTERISTICS (Ta=25°C, Vcc=3.3V, RI=100Ω)

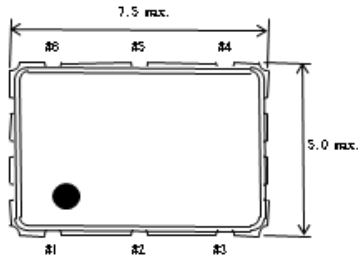
PARAMETERS	CONDITIONS	SPECIFICATIONS
Frequency Range (MHz)		75.000~315.000
Frequency Stability	All conditions (Note 1 & 2)	±25ppm~±100ppm
Symmetry	Crossing Point (0V)	45/55%
Differential Output Voltage (Vod)		0.33V Typ.
Differential Output Voltage Swing (Vopp)		0.35Vp-p Min.
Offset Voltage (Vos)		1.125V~1.375V (1.25V Typ.)
Rise Time (Tr)	20% to 80%Vp-p	0.7ns Max.
Fall Time (Tf)	80% to 20%Vp-p	0.7ns Max.
Stand-by Current	Vil ≤ 30%Vcc	30µA Max.
Output Load	Out1 - Out2	100Ω
Start-up Time	0.0V to 3.3V	10ms Max.
Jitter	Phase Jitter (12kHz~20MHz) Period Jitter (n=5,000 cycles)	1ps RMS Max. 5ps RMS Max.
Input Current (Icc)		66mA Max.

Note1: Inclusive of 25°C tolerance, operating temperature range, input voltage change and load change.

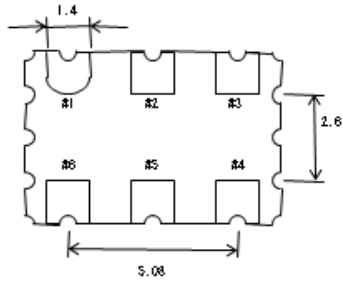
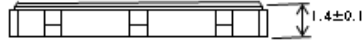
Note 2: A capacitor shall be located just beside the oscillator for power supply noise reduction. And also the large capacitance capacitor such as electrolytic capacitor shall be located at power supply.

Note 3: ±25ppm/-40~+85°C is NOT available over 170MHz.

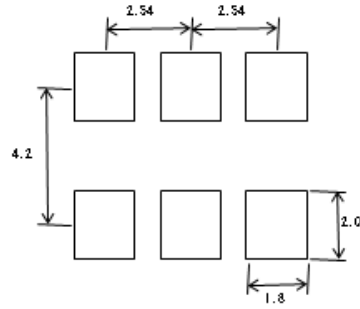
DIMENSIONS (mm)



ENABLE/DISABLE FUNCTION		
CONTROL (Pin #1)	OUTPUT1 (Pin #4)	OUTPUT2 (Pin #5)
Open	Active	Active
"1" (VH \leq 70%Vcc)	Active	Active
"0" (VL \leq 30%Vcc)	High Z	High Z



RECOMMENDED
SOLDER PAD LAYOUT



Pin Connections	
#1	NC
#2	E/D
#3	GND
#4	OUTPUT 1
#5	OUTPUT 2
#6	Vcc