

# OT-M Type

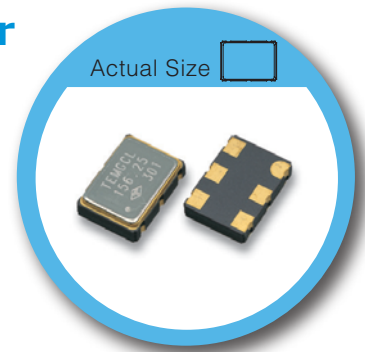
## 7.0 x 5.0 mm SMD CMOS Crystal Oscillator

### FEATURE

- Industry Standard 7.0 x 5.0 hermetically sealed ceramic package
- Very low phase jitter: < 1 pS(0.6 pS, typ.) RMS
- Any frequency between 8 MHz and 250 MHz.
- Tri-state enable/disable
- Fast delivery

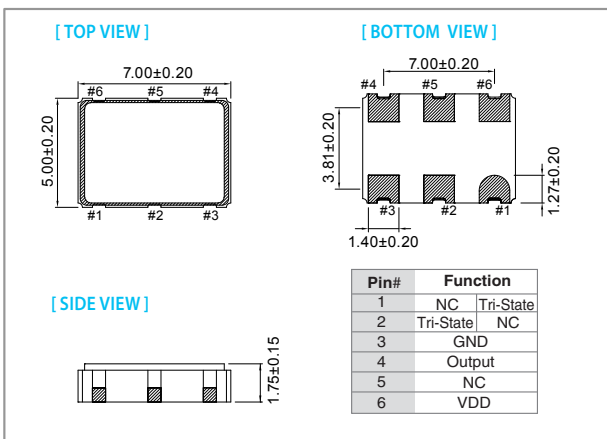
### TYPICAL APPLICATION

- High-Speed Gbit Ethernet, Fiber Channel, Storage Area Network, SONET
- Enterprise Server, SAS/SATA
- Microprocessors / DSP / FPGA
- Broadband Access
- Smart Grid

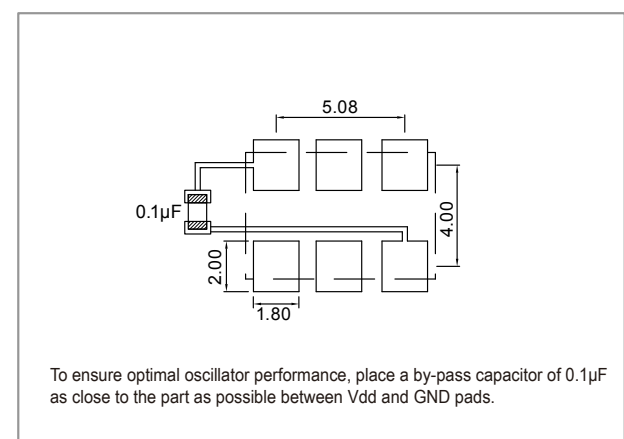


RoHS Compliant

### DIMENSION (mm)



### SOLDER PAD LAYOUT (mm)



### ELECTRICAL SPECIFICATION

Parameter	CMOS				unit
	3.3 V		2.5 V		
	Min.	Max.	Min.	Max.	
<b>Supply Voltage Variation (VDD) ±5%</b>	3.135	3.465	2.375	2.625	V
<b>Frequency Range</b>	8	250	8	250	MHz
<b>Standard Frequency</b>	106.25, 125, 133.33, 150, 155.52, 156.25, 187.5, 212.5				
<b>Supply Current</b> 8 MHz ≤ Fo ≤ 250 MHz	-	30	-	30	mA
<b>Output Level</b>	Output High (Logic "1")	2.97	-	2.25	V
	Output Low (Logic "0")	-	0.33	-	
<b>Transition Time: Rise/Fall Time+</b>	-	1.5	-	1.5	nSec
<b>Start Time</b>	-	10	-	10	mSec
<b>Tri-State(Input to Pin 2 or Pin 1)</b>	Enable (High voltage or floating)	2.31	-	1.75	V
	Disable (Low voltage or GND)	-	0.99	-	
<b>RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz)</b>	-	1.0	-	1.0	pSec
<b>Phase Noise@125 MHz</b>	100 Hz	-	-75	-	dBc/Hz
	1 kHz	-	-105	-	
	10 kHz	-	-120	-	
<b>Aging (@ 25°C 1st year)</b>	-	±3	-	±3	ppm
<b>Storage Temp. Range</b>	-55	125	-55	125	°C

+ Transition times are measured between 20% and 80% of VDD.

### FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	
	±25	±50
-10 ~ +60	○	○
-20 ~ +70	○	○
-40 ~ +85	△	○

\* ○ : Available △:Conditional X: Not available

\* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1<sup>st</sup> year), shock, and vibration

**Note: not all combination of options are available. Other specifications may be available upon request.**