

**SMD CMOS output**  
**7.0 x 5.0 x 1.8 mm**



**Features**

- Ultra Small SMD seam sealed clock crystal oscillator units.
- Tri-state function available.

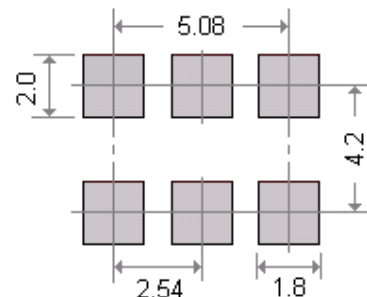
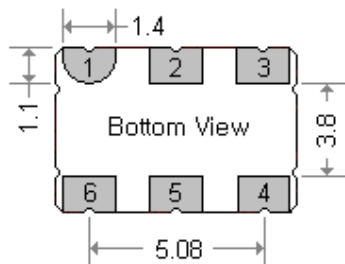
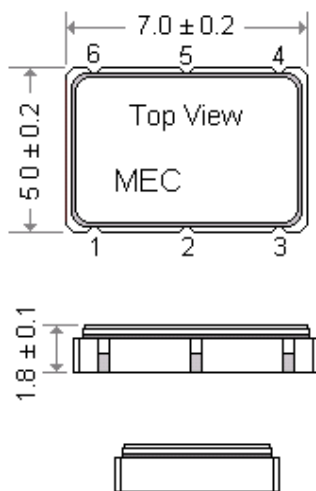
**Applications**

- CPU , Graphics , Multimedia A / V clocks
- MPEG / DVD / HDTV clocks
- Laser engine pixel / set - top clocks
- OC-3 , OC-12 , OC-48 and OC-192 clocks
- SONET / SDH / ATM clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PAL encoder / decoder clocks
- PLL / synthesizer clocks
- Fibre channel and ADSL clocks

**General Specifications**

Parameters		Electrical Spec.							
Input Voltage ( V <sub>DD</sub> )		3.3 V ± 5 %							
Frequency Range / Load		125.1 ~ 200.0 MHz / [ 15pF load ]							
Output Wave Form		CMOS output							
Output Logic High " 1 "		0.9 V ( min. )							
Output Logic Low " 0 "		0.1 V ( max. )							
Integrated Phase Noise ( 12 KHz to 20 MHz )		2.3 ps ( typical ) ; 4.0 ps ( max. )							
Rise Time ( Tr ) / Fall Time ( Tf )		0.7n sec.( typical ) [ 0.3 V ↔ 3.0V, 15 pF load ]							
Duty Cycle		50% ± 10% [ 50% ± 5% is also available ]							
Current Consumption		45 mA max.							
Start - Up Time (Ts)		10 m sec.( typical )							
Storage Temperature		- 50°C to 100°C							
Aging		± 3 ppm per year (max.)							
Frequency Stability <sup>(1)</sup> Codes	Frequency Stability over Operating Temperature Range	± 25 ppm	± 50 ppm	± 100 ppm	If non-standard , please enter the desired stability after the " C " or " I "				
	Commercial ( -10°C to +70°C )	A	B	C	For example :				
	Industrial ( -40°C to +85°C )	D	E	F	" C20 " ±20 ppm over -10°C to +70°C ; " I20 " ± 20 ppm over -40°C to +85°C				
Phase Noise ( typical ) [ 156.250 MHz ]		Offset dBc / Hz	10 Hz	100 Hz	1K Hz	10 KHz	100KHz	1 MHz	10 MHz
			-65	-95	-120	-125	-121	-120	-140

**Outline Dimensions ( Unit : mm )**



- Pad Connections :
- Pad 1 : No connection
  - Pad 2 : Tri - state
  - Pad 3 : Ground
  - Pad 4 : Output
  - Pad 5 : Complimentary output
  - Pad 6 : Supply voltage

Mercury [www.mercury-crystal.com](http://www.mercury-crystal.com)