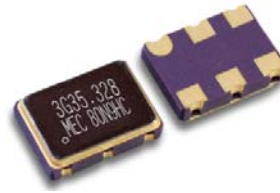


**SMD CMOS output 6 pads**  
**7.0 x 5.0 x 1.8 mm**



RoHS Compliance

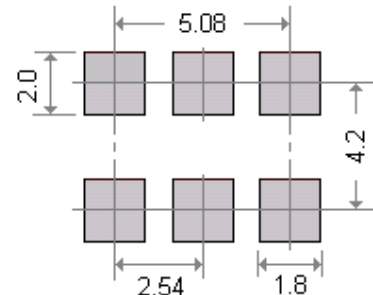
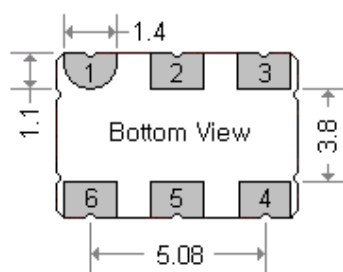
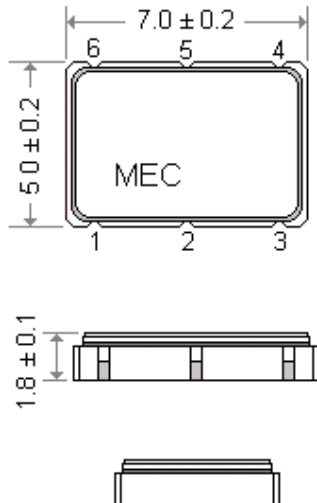
**Applications :** Tri-state function on Pad No. 2 , 5

- SONET / ATM
- set -top boxes
- audio -video modulations
- video game consoles and HDTV sets
- MPEG , SONET , 10GbE
- Fibre Channel , Transponders
- Wireless repeaters
- HDTV , FPGAs , data acquisition

**General Specifications**

Parameters		Electrical Spec.							
Input Voltage ( V <sub>DD</sub> )		3.3 V ± 5 %							
Frequency Range		0.625 ~ 50.0 MHz [ Fundamental crystal used ]							
Output Wave Form		TTL / CMOS output							
Initial Freq. Accuracy ( at 25 °C )		To tune to the nomial frequency with Vc = 1.65V ± 0.2V							
Output Logic High " 1 "		TTL	2.4 V ( min. )		CMOS	2.97 V ( min. )			
Output Logic Low " 0 "		TTL	0.4 V ( min. )		CMOS	0.33 V ( min. )			
Frequency Deviation Range		Standard : ± 80 ppm ( min. )							
Control Voltage Center / Control Voltage Range		1.65 VDC / 0.3V to 3.0V							
Output Load		15 pF							
Rise Time ( Tr )		6 nSec.(max.) ; 4 nSec.(typ.) . Measured between 0.4V to 2.4V.							
Fall Time ( Tf )		6 nSec.(max.) ; 4 nSec.(typ.) Measured 20% to 80% of wave form							
Duty Cycle		50% ± 10% [ 50% ± 5% is also available ]							
Current Consumption		20 mA ( max. )							
Start - Up Time ( Ts )		10 m sec. ( max. ) ; 5 m sec.( typical )							
Integrated Phase Jitter ( 12 KHz to 20 MHz ) .		1 ps ( max. )							
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 " For example : " C20 " ±20 ppm over -10°C to +70°C ; " I20 " ± 20 ppm over -40°C to +85°C	
	Commercial ( -10°C to +70°C )	A	B	C					
	Industrial ( -40°C to +85°C )	D	E	F					
Phase Noise ( typical ) [ 27.0 MHz at 3.3V ]		Offset	10 Hz	100 Hz	1K Hz	10 KHz	100KHz	1 MHz	10 MHz
		dBc / Hz	-75	-104	-132	-145	-148	-150	-152

**General Specifications ( Unit : mm )**



- Pad Connections :
- Pad 1 : Control Voltage
  - Pad 2 : Tri - state
  - Pad 3 : Ground
  - Pad 4 : Output
  - Pad 5 : Tri - state
  - Pad 6 : Supply voltage

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