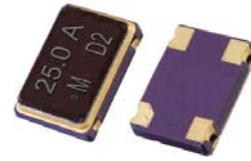


**SMD CMOS output**  
**3.2 x 2.5 x 1.0 mm**



**Features**

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

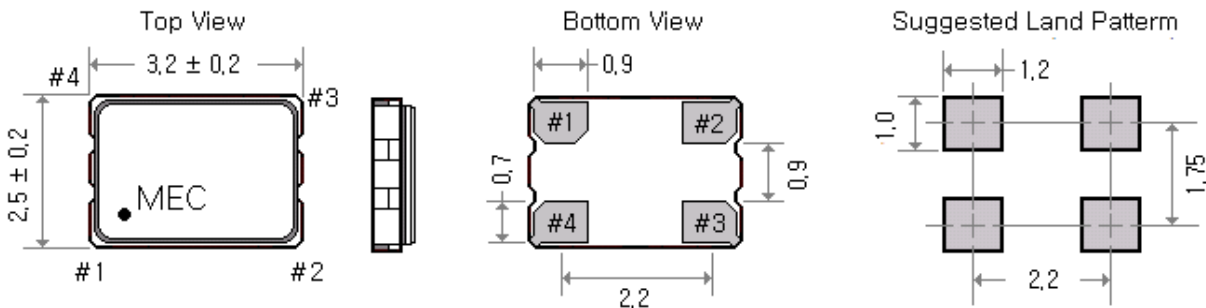
**Applications**

- Short lead time. Form 1 day to 1 week .
- Low jitter. Peak-to-peak period jitter is 70 ps typical
- Low phase noise: -114 dBc/Hz at 1 KHz offse
- Custom frequencies can easily be configured
- 1.8V, 2.5V or 3.3V supply voltages.

**General Specifications**

Parameters		Electrical Spec.			
Input Voltage ( V <sub>DD</sub> )		1.8 V ± 5 %			
Frequency Range		1.0 ~ 110.0 MHz			
Output Wave Form		CMOS output			
Output Logic High " 1 "		1.62 V ( min. ) [ 90 % of V <sub>DD</sub> ]			
Output Logic Low " 0 "		0.18 V ( max. ) [ 10 % of V <sub>DD</sub> ]			
Output Load		15 pF			
Rise Time ( Tr ) / Fall Time ( Tf )		4.0 ns ( typ. ) [ 25 MHz PLL off ]		1.5 ns ( typ. ) [ 200 MHz PLL off ]	
Duty Cycle		50% ± 5% [ measured at 50% V <sub>DD</sub> ]			
Current Consumption		Supply Current		PLL ON : Supply Current	
		[ 25.0 MHz ]	[ 200.0 MHz ]	[ 25.0 MHz ]	[ 200.0 MHz ]
		2.5 mA	8.0 mA	2.0 mA	8.5 mA
Start - Up Time (Ts)		5 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 "  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	

**Outline Dimensions ( Unit : mm )**



Pad 1 : Eable / Disable ( pad #1 is Tri-state for all H32 series )  
 Pad 2 : Ground  
 Pad 3 : Output  
 Pad 4 : Voltage Supply

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