

**SMD LVDS output**  
11.4 x 9.6 x 2.5 mm



RoHS Compliance

**Features**

- Tri-state function available on pad No. 2.

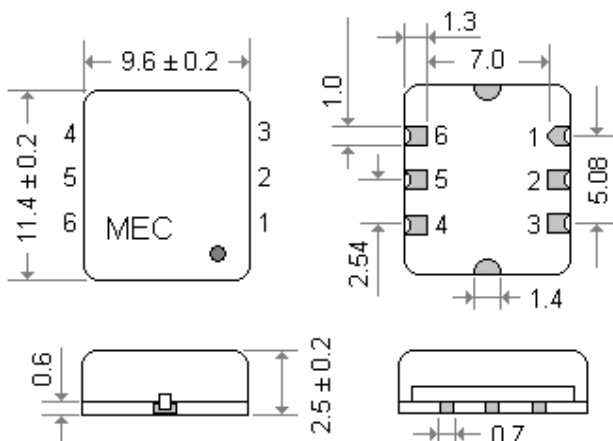
**Applications**

- HDK femto second integrated phase jitter ( 200 fs typical , 12 KHz to 20 MHz ) .
- HDK superior phase noise ( -138 dBc/Hz at 10 KHz and -144 dBc/Hz at 100 KHz offset ) .
- 2.5 V or 3.3 V supply voltage .

**General Specifications**

Parameters		Electrical Spec.							
Input Voltage ( V <sub>DD</sub> )		2.5 V ± 5 %							
Frequency Range / Load		13.5 MHz ~ 200,0 MHz							
Output Wave Form		LVDS output							
Output Logic High " 1 "	typical	1.43 V ( RL = 100 Ω )							
	max.	1.60 V ( RL = 100 Ω )							
Output Logic Low " 0 "	min.	0.9 V ( RL = 100 Ω )							
	typical	1.1 V ( RL = 100 Ω )							
Integrated Phase Noise ( 12 KHz to 20 MHz )		0.2 ps ( typical ) ; 0.5 ps ( max. )							
Rise Time ( Tr ) / Fall Time ( Tf )		0.3n sec.( typical ) ; 0.5 n sec. ( max. )							
Output Voltage Swing		250 mV min. ( V <sub>DD</sub> = +2.5V )							
Duty Cycle		50% ± 10% [ 50% ± 5% is also available ]							
Load		50 Ω into Vcc - 2V or Thevenin equivalent							
Current Consumption ( 15 pF load )		30 mA ( typical ) , 50 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	10 Hz	100 Hz	1K Hz	10 KHz	100KHz	1 MHz	10 MHz
		dBc / Hz	-75	-90	-120	-135	-142	-147	-155

**Outline Dimensions ( Unit : mm )**



Pad Connections			
1	No Connection	4	Output
2	Tri - state	5	Complimentary output
3	Ground	6	Supply Voltage