Oscillators Series [Differential LVDS] **HDK14 series 2.5 V**

Dip type LVDS output
20.2 x 12.8 x 6.0 mm



RoHS Compliance

Applications

- HDK femto second integrated phase jitter (200 fs typical , 12 KHz to 20 MHz) .
- HDK supeior 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 .

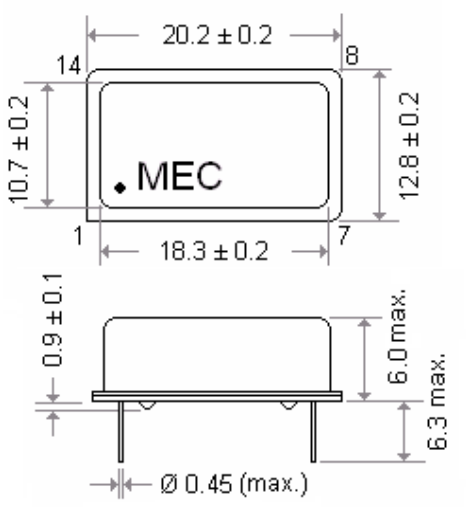
General Specifications

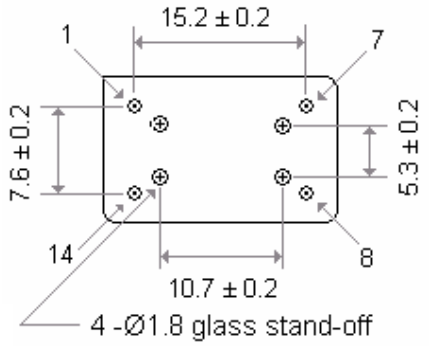
Paramenters		Electrical Spec.
Input Voltage (V_{DD})		2.5 V ± 5 %
Frequency Range / Load		13.5 MHz ~ 200,0 MHz
Output Wave Form		LVDS output
Output Logic High " 1 "	typical	1.43 V (RL = 100 Ω)
	max.	1.60 V (RL = 100 Ω)
Output Logic Low " 0 "	min.	0.9 V (RL = 100 Ω)
	typical	1.1 V (RL = 100 Ω)
Integrated 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_{DD} = +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 [1] 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) [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)





Pin Connections :

Pin 1 : Complimentary output
Pin 7 : Ground
Pin 8 : Output
Pin 14 : Supply

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