

Dip type CMOS output

20.2 x 12.8 x 6.0 mm

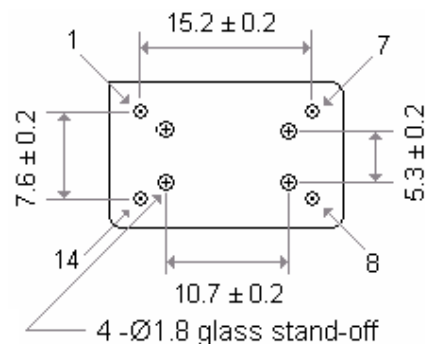
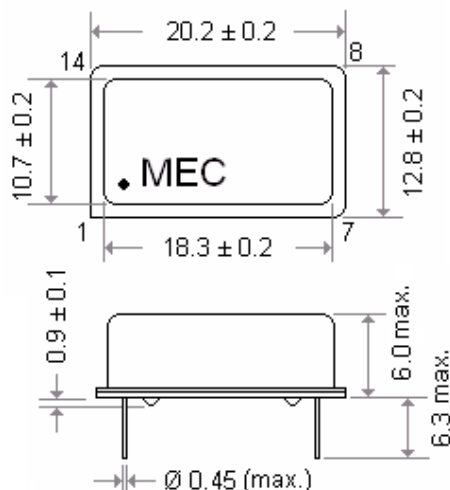
Phase Jitter &lt; 4.0 ps [ 50.1 ~ 200.0 MHz ]

**Applications :**

- high-Q fundamental crystals and multiplier circuits with moderate jitter.

**General Specifications**

Parameters		Electrical Spec.							
Input Voltage ( $V_{DD}$ )		3.3 V $\pm$ 5 %							
Frequency Range		50.1 ~ 200.0 MHz							
Output Wave Form		CMOS output							
Initial Freq. Accuracy ( at 25 °C )		To tune to the nominal frequency with $V_c = 1.65V \pm 0.15V$							
Output Logic High " 1 "		90% $V_{DD}$ ( min. )							
Output Logic Low " 0 "		10% $V_{DD}$ ( max. )							
Frequency Deviation Range		Standard : $\pm$ 80 ppm ( min. )							
Control Voltage Center / Control Voltage Range		1.65 VDC / 0.3 V to 3.0 V							
Integrated Phase Jitter ( 12 KHz to 20 MHz ) .		2.3 ps ( typical ) ; 4.0 ps ( max. ) for 155.520 MHz							
Output Load		15 pF							
Rise Time ( $T_r$ ) / Fall Time ( $T_f$ )		2.4 nSec. ( typical ) . Measured between 0.3V to 3.0V ( 15pF load )							
Duty Cycle		50% $\pm$ 10% [ 50% $\pm$ 5% is also available ]							
Current Consumption		50 ~ 200 MHz : 40 mA ( max. )							
Start - Up Time ( $T_s$ )		10 m sec. ( max. ) ; 5 m sec. ( typical )							
Input Impedance		2 M $\Omega$ ( min. )							
Storage Temperature		- 50°C to 100°C							
Aging		$\pm$ 3 ppm per year ( max. )							
Frequency Stability <sup>(1)</sup> Codes	Frequency Stability over Operating Temperature Range	$\pm$ 25 ppm	$\pm$ 50 ppm	$\pm$ 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 " $\pm$ 20 ppm over -10°C to +70°C ; " I20 " $\pm$ 20 ppm over -40°C to +85°C				
Phase Noise ( typical ) [ 155.520 MHz ]		Offset	10 Hz	100 Hz	1K Hz	10 KHz	100KHz	1 MHz	10 MHz
		dBc / Hz	-65	-95	-120	-128	-122	-120	-140

**Outline Dimensions ( Unit : mm )****Pin Connections :**

- Pin 1 : Voltage control
- Pin 7 : Ground
- Pin 8 : Output
- Pin 14 : Supply Voltage

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