

# DIP TYPE STD



- Temperature Compensated Crystal Oscillator
- HCMOS / TTL output
- Clipped Sinewave Output
- 3.3 / 5.0 supply voltage

## ELECTRICAL SPECIFICATIONS

	HCMOS / TTL	CLIPPED SINEWAVE
Frequency Range	1.200 to 200.000Mhz	9.600 to 50.000MHz
Operating Temperature Range	0°C ~ +50°C to -40°C ~ +85°C	
Storage Temperature Range	-55°C ~ 125°C	
Frequency / Stability Vs. operating Temperature Range Vs. Input Voltage (±5%) Vs. Load (±10%) Vs. Aging	See Table 2 ±0.3ppm max. ±0.3ppm max. ±1.0ppm max.	
Output Level	TTL : 2.4V <sub>DC</sub> min, 0.4V <sub>DC</sub> max HCMOS : 90% of V <sub>DD</sub> min 10% of V <sub>DD</sub> max	0.8Vp-p min (V <sub>DD</sub> : 3.3V <sub>DC</sub> ) 1.0Vp-p min (V <sub>DD</sub> : 5.0V <sub>DC</sub> )
Supply Voltage( V <sub>DD</sub> )	3.3V to 5.0V	
Input Current	20mA to 60mA	2mA to 5mA
Internal Trim(top of Can)	±3ppm min.	
Rise / Fall Time	4ns max	
Duty Cycle	40 / 60, 45 / 55	
Frequency Deviation	±5ppm or ±10ppm minimum Over Control Voltage	

## Part Numbering Guide

MODEL (PKG TYPE)	SUPPLY VOLTAGE	FREQUENCY STABILITY	OPER-TEMP RANGE	OUTPUT	DEVITION	PACKING	FREQUENCY (MHZ)
STD	BLANK : 5.0V 3 : 3.3V	TABLE2 REFERENCE	TABLE2 REFERENCE	T : TTL M : HCMOS C : COMPATIBLE S : CLIPPED SINE WAVE	5 : ±5ppm min. 10 : ±10ppm min. BLANK : TCXO	BLANK : BULK R : TAPE & REEL	xx.xxx(STD) xx.xxxxxx

Table2.

		FREQUENCY STABILITY vs. TEMPERATURE RANGE								
Temp	Stability	±1.0ppm	±1.5ppm	±2.0ppm	±2.5ppm	±3.0ppm	±3.5ppm	±4.0ppm	±4.5ppm	±5.0ppm
		10	15	20	25	30	35	40	45	50
0 ~ 50°C	A	*	*	*	*	*	*	*	*	*
-10 ~ 60°C	B		*	*	*	*	*	*	*	*
-10 ~ 70°C	C		*	*	*	*	*	*	*	*
-20 ~ 70°C	D			*	*	*	*	*	*	*
-30 ~ 60°C	E				*	*	*	*	*	*
-30 ~ 70°C	F				*	*	*	*	*	*
-30 ~ 75°C	G				*	*	*	*	*	*
-40 ~ 80°C	H				*	*	*	*	*	*
-40 ~ 85°C	I				*	*	*	*	*	*

## MECHANICAL DIMENSIONS

(mm)

