

SMD TYPE
STE

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

ELECTRICAL SPECIFICATIONS

	HCMOS / TTL	CLIPPED SINEWAVE
Frequency Range	1.200 to 50.000Mhz	9.600 to 50.000MHz
Operating Temperature Range	0℃ ~ +50℃ to -40℃ ~ +85℃	
Storage Temperature Range	-55℃ ~ 125℃	
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 _{DC} min, 0.4V _{DC} max HCMOS : 90% of V _{DD} min 10% of V _{DD} max	0.8Vp-p min (V _{DD} : 3.3V _{DC}) 1.0Vp-p min (V _{DD} : 5.0V _{DC})
Supply Voltage(V _{DD})	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

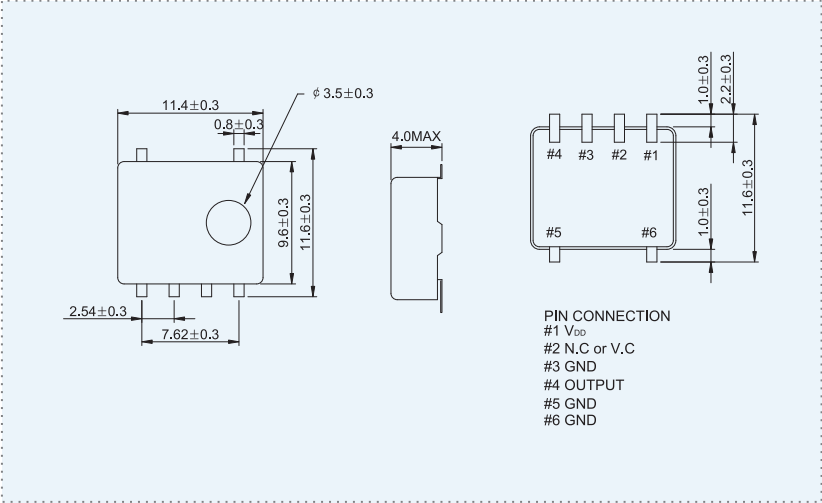
MODEL (PKG TYPE)	SUPPLY VOLTAGE	FREQUENCY STABILITY	OPER-TEMP RANGE	OUTPUT	DEVITION	PACKING	FREQUENCY (MHZ)
STE	BLANK : 5.0V 3 : 3.3V	TABLE2 REFERENCE	TABLE2 REFERENCE	T : TTL M : HCMOS C : COMPATIBLE S : CLIPPED SINE WAVE	5 : ±5ppm min. 10 : ±10ppm min. BLANK : TCXO	BLANK : BULK R : TAPE & REEL	xx.xxx(STD) 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℃	A	*	*	*	*	*	*	*	*	*
-10 ~ 60℃	B		*	*	*	*	*	*	*	*
-10 ~ 70℃	C		*	*	*	*	*	*	*	*
-20 ~ 70℃	D			*	*	*	*	*	*	*
-30 ~ 60℃	E				*	*	*	*	*	*
-30 ~ 70℃	F				*	*	*	*	*	*
-30 ~ 75℃	G				*	*	*	*	*	*
-40 ~ 80℃	H				*	*	*	*	*	*
-40 ~ 85℃	I				*	*	*	*	*	*

MECHANICAL DIMENSIONS

(mm)



LAND PATTERN

(mm)

