

SMD 7.5x5.0mm
3.3V OSCILLATOR

NMSOL3



FREQUENCY STABILITY

MODEL	FREQUENCY STABILITY
NM1SOL3	±100PPM/-10 ~ +70°C
NM2SOL3	± 50PPM/-10 ~ +70°C
NM3SOL3	± 25PPM/-10 ~ +70°C
NM4SOL3	± 20PPM/-10 ~ +70°C
NM1SOL3R	±100PPM/-40 ~ +85°C
NM2SOL3R	± 50PPM/-40 ~ +85°C
NM3SOL3R	± 25PPM/-40 ~ +85°C

OPERATING CONDITIONS

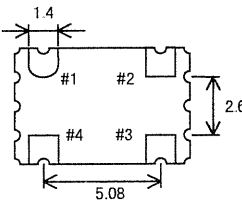
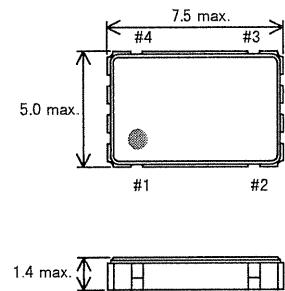
Operating Temperature	-10 ~ +70°C, -40 ~ +85°C
Storage Temperature	-55 ~ +125°C
Supply Voltage (VDD)	+3.3V±0.3V

ELECTRICAL CHARACTERISTICS (Ta=25°C, VDD=3.3V, CL=15pF)

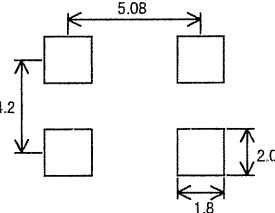
PARAMETERS	CONDITIONS	FREQUENCY RANGE	SPECIFICATIONS
Input Current (IDD)		12.000kHz ~ 32.000MHz	12mA Max.
		32.000 ⁺ ~ 50.000MHz	16.5mA Max.
		50.000 ⁺ ~ 67.000MHz	18mA Max.
		67.000 ⁺ ~ 125.000MHz	40mA Max.
		125.000 ⁺ ~ 170.000MHz	50mA Max.
Frequency Stability	All conditions (Note)	12.000kHz ~ 99.999MHz 100.000 ⁺ ~ 170.000MHz	±20PPM ~ ±100PPM ±25PPM ~ ±100PPM
Symmetry	@50% VDD	12.000kHz ~ 50.000MHz 50.000 ⁺ ~ 170.000MHz	45/55% 40/60%
Output Voltage (VOL) (VOH)	"0" Level "1" Level	12.000kHz ~ 170.000MHz	10% VDD Max. 90% VDD Min.
Rise Time (TR)	10% VDD to 90% VDD	12.000kHz ~ 80.000MHz 80.000 ⁺ ~ 125.000MHz 125.000 ⁺ ~ 170.000MHz	6nS Max. 4nS Max. 3nS Max.
Fall Time (TF)	90% VDD to 10% VDD	12.000kHz ~ 80.000MHz 80.000 ⁺ ~ 125.000MHz 125.000 ⁺ ~ 170.000MHz	6nS Max. 4nS Max. 3nS Max.
Output Current (IOL) (IOH)	"0" Level "1" Level	12.000kHz ~ 170.000MHz	2mA Min. 2mA Min.
Stand-by Current	VIL ≤ 30% VDD	12.000kHz ~ 170.000MHz	10 μA Max.
Driving Ability	TTL	12.000kHz ~ 170.000MHz	10 LS-TTL Max.
	HCMOS	12.000kHz ~ 170.000MHz	15pF Max.
Start-up Time	0.0V to 3.3V	12.000kHz ~ 32.000MHz	5mS Max.
		32.000 ⁺ ~ 170.000MHz	10mS Max.

Note: Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock and vibration.

DIMENSIONS (mm)



RECOMMENDED
SOLDER PAD LAYOUT



ENABLE/DISABLE FUNCTION	
INH (Pin #1)	OUTPUT (Pin #3)
Open	Active
"1" (VIH ≥ 70%VDD)	Active
"0" (VIL ≤ 30%VDD)	High Z

Pin Connections	
#1	E/D
#2	GND
#3	OUT
#4	VDD

