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SMD 7.5x5.0mm 3.3V OSCILLATOR

NM4SOL3

NEW

FREQUENCY STABILITY

MODEL	FREQUENCY STABILITY
NM1SOL3	$\pm 100\text{PPM}/-10 \sim +70^\circ\text{C}$
NM2SOL3	$\pm 50\text{PPM}/-10 \sim +70^\circ\text{C}$
NM3SOL3	$\pm 25\text{PPM}/-10 \sim +70^\circ\text{C}$
NM4SOL3	$\pm 20\text{PPM}/-10 \sim +70^\circ\text{C}$
NM1SOL3R	$\pm 100\text{PPM}/-40 \sim +85^\circ\text{C}$
NM2SOL3R	$\pm 50\text{PPM}/-40 \sim +85^\circ\text{C}$
NM3SOL3R	$\pm 25\text{PPM}/-40 \sim +85^\circ\text{C}$

OPERATING CONDITIONS

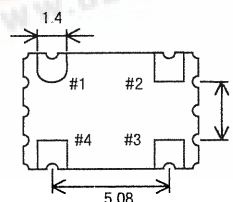
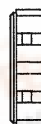
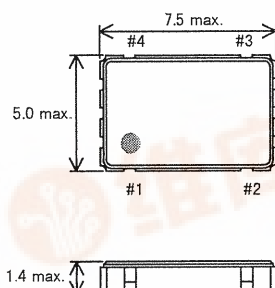
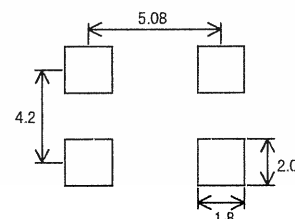
Operating Temperature	$-10 \sim +70^\circ\text{C}, -40 \sim +85^\circ\text{C}$
Storage Temperature	$-55 \sim +125^\circ\text{C}$
Supply Voltage (VDD)	$+3.3\text{V} \pm 0.3\text{V}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, $V_{DD}=3.3\text{V}$, $C_L=15\text{pF}$)

PARAMETERS	CONDITIONS	FREQUENCY RANGE	SPECIFICATIONS
Input Current (I_{DD})		12.000kHz $\sim$ 32.000MHz	12mA Max.
		32.000 $^+$ $\sim$ 50.000MHz	16.5mA Max.
		50.000 $^+$ $\sim$ 67.000MHz	18mA Max.
		67.000 $^+$ $\sim$ 125.000MHz	40mA Max.
		125.000 $^+$ $\sim$ 170.000MHz	50mA Max.
Frequency Stability	All conditions (Note)	12.000kHz $\sim$ 99.999MHz	$\pm 20\text{PPM} \sim \pm 100\text{PPM}$
		100.000 $^+$ $\sim$ 170.000MHz	$\pm 25\text{PPM} \sim \pm 100\text{PPM}$
Symmetry	@50% VDD	12.000kHz $\sim$ 50.000MHz	45/55%
		50.000 $^+$ $\sim$ 170.000MHz	40/60%
Output Voltage (V_{OL}) (V_{OH})	"0" Level	12.000kHz $\sim$ 170.000MHz	10% VDD Max.
	"1" Level		90% VDD Min.
Rise Time (T_R)	10% VDD to 90% VDD	12.000kHz $\sim$ 80.000MHz	6nS Max.
		80.000 $^+$ $\sim$ 125.000MHz	4nS Max.
		125.000 $^+$ $\sim$ 170.000MHz	3nS Max.
Fall Time (T_F)	90% VDD to 10% VDD	12.000kHz $\sim$ 80.000MHz	6nS Max.
		80.000 $^+$ $\sim$ 125.000MHz	4nS Max.
		125.000 $^+$ $\sim$ 170.000MHz	3nS Max.
Output Current (I_{OL}) (I_{OH})	"0" Level	12.000kHz $\sim$ 170.000MHz	2mA Min.
	"1" Level		2mA Min.
Stand-by Current	$V_{IL} \leq 30\% V_{DD}$	12.000kHz $\sim$ 170.000MHz	10 μA Max.
Driving Ability	TTL	12.000kHz $\sim$ 170.000MHz	10 LS-TTL Max.
	HCMOS	12.000kHz $\sim$ 170.000MHz	15pF Max.
Start-up Time	0.0V to 3.3V	12.000kHz $\sim$ 32.000MHz	5mS Max.
		32.000 $^+$ $\sim$ 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" ($V_{IH} \geq 70\% V_{DD}$)	Active
"0" ($V_{IL} \leq 30\% V_{DD}$)	High Z

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