

# Clock Oscillators (SMD)



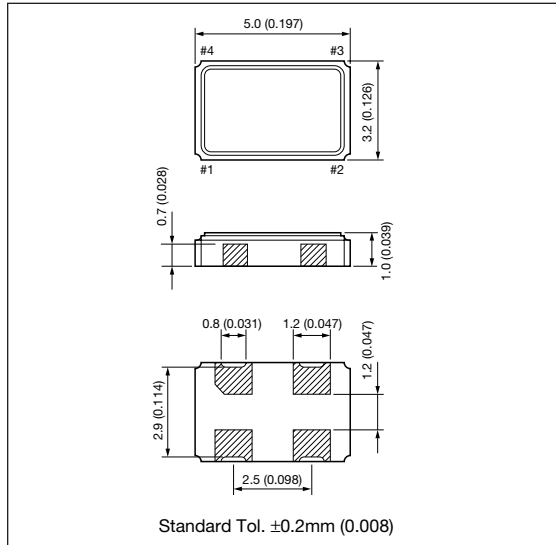
## K30-3C Series (3.3V)

### K30 SERIES



### DIMENSIONS

millimeters (inches)



### PIN CONNECTION

Pin #	Function
1	CONTROL
2	CASE GND
3	OUTPUT
4	+V <sub>CC</sub>

### ENABLE/DISABLE

Pin #1	Pin #3
"H" or Open	Oscillation
"L"	High Impedance or Oscillation Stop

### FEATURES

- High reliable miniature SMD ceramic package
- Frequency range = 8MHz to 67MHz
- Frequency tolerance = ±100ppm, ±50ppm
- Tristate output inhibit
- Low current consumption

### APPLICATIONS

- PDAs
- Notebook PC
- Portable electronics

### HOW TO ORDER

**K30 - 3C 1**  **E 40.0000M R**

#### Packaging

R = Tape and reel,  
1,000 pcs/reel

#### Frequency (MHz)

13.0000	24.5760	30.0000
14.31818	25.0000	32.0000
16.0000	27.0000	44.0000
17.7345	28.37516	48.0000
20.0000	28.63636	66.6667
24.0000	29.4989	—

#### Enable/Disable Function

E = with function (STD)

#### Duty Ratio

= 40% to 60% (STD)  
S = 45% to 55%  
(f>20MHz)

#### Tolerance

1 = ±100ppm  
0 = ±50ppm

#### Series

### SPECIFICATIONS

Items	Code	Rating	Unit	Remarks
Output Frequency	F <sub>OUT</sub>	8 to 67	MHz	—
Frequency Tolerance	ΔF/F	±100, ±50	ppm	Over all Conditions
Aging	ΔF/F	±5	ppm/y	@ 25°C
Operating Temperature	T <sub>OPR</sub>	-10 to 70	°C	—
Storage Temperature	T <sub>STR</sub>	-55 to 125	°C	—
Supply Voltage	V <sub>CC</sub>	3.3±0.3	V	—
Supply Current	I <sub>CC</sub>	25 max.	mA	Loaded @ 67 MHz
Stand by Current	I <sub>ST</sub>	10 max.	μA	—
Duty Ratio	SYM	40 to 60, 45 to 55	%	0.5V <sub>CC</sub> DC Level
Output 0 Level	V <sub>OL</sub>	0.1V <sub>CC</sub> max.	V	I <sub>OL</sub> = 8mA
Output 1 Level	V <sub>OH</sub>	0.9V <sub>CC</sub> min.	V	I <sub>OH</sub> = -8mA
Rise/Fall Time	T <sub>R</sub> , T <sub>F</sub>	10 max.	nsec	0.1V <sub>CC</sub> -0.9V <sub>CC</sub>
Load Capacitance	C <sub>L</sub>	15 max.	pF	—
Enable/Disable Time	—	5 max.	msec	—
Input Voltage Low	V <sub>IL</sub>	0.3V <sub>CC</sub> max.	V	—
Input Voltage High	V <sub>IH</sub>	0.7V <sub>CC</sub> min.	V	—
Start-up Time	ST	10 max.	mS	Minimum Operating Voltage to be 0sec