

# Clock Oscillators (SMD)

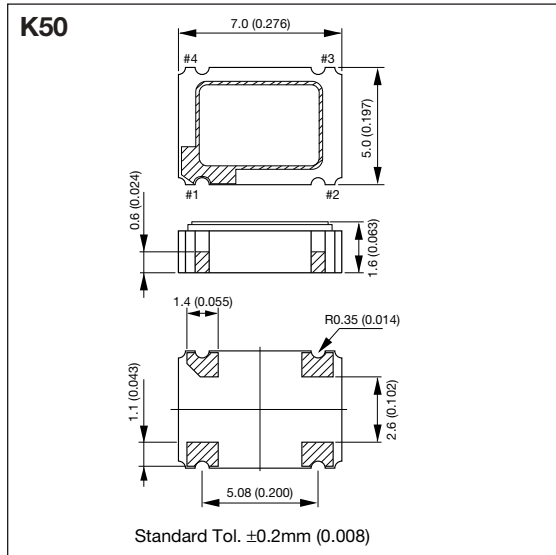


## K50-3C Series (3.3V)

### K50 SERIES



### DIMENSIONS millimeters (inches)



### FEATURES

- High reliable SMD ceramic package
- Frequency range = 8MHz to 80MHz
- Frequency tolerance =  $\pm 100\text{ppm}$ ,  $\pm 50\text{ppm}$
- Tristate output inhibit

### APPLICATIONS

- PDAs
- Switches
- Routers
- Servers

### HOW TO ORDER

**K50 - 3C 1 □ E 40.0000M R**

**Series**  
K50 - 3C

**Tolerance**  
1 =  $\pm 100\text{ppm}$   
0 =  $\pm 50\text{ppm}$

**Frequency (MHz)**

8.00000	27.0000	49.0000
13.0000	29.4989	49.1520
14.31818	30.0000	50.0000
16.0000	32.0000	53.1250
20.0000	33.8688	64.0000
24.0000	35.3280	66.6667
24.5760	40.0000	80.0000
25.0000	44.0000	—

**Enable/Disable Function**  
E = with function (STD)

**Duty Ratio**  
□ = 40% to 60% (STD)  
S = 45% to 55%  
( $f > 20\text{MHz}$ )

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

### PIN CONNECTION ENABLE/DISABLE

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

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

### SPECIFICATIONS

Items	Code	Rating	Unit	Remarks
Output Frequency	F <sub>OUT</sub>	8 to 80	MHz	—
Frequency Tolerance	$\Delta F/F$	$\pm 100, \pm 50$	ppm	Over all conditions
Aging	$\Delta F/F$	$\pm 5$	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 $\pm$ 0.3	V	—
Supply Current	I <sub>CC</sub>	25 max.	mA	Loaded @ 80MHz
Disable/Stand by Current	I <sub>DE</sub> /I <sub>ST</sub>	10 max.	$\mu\text{A}$	8 $\leq$ F $\leq$ 32MHz
		15 max.	mA	32<F $\leq$ 50MHz
		10 max.	$\mu\text{A}$	50<F $\leq$ 80MHz
Duty Ratio	SYM	40 to 60	%	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	8 $\leq$ F $\leq$ 32MHz
		150 max.	nsec	32<F $\leq$ 50MHz
		5 max.	msec	50<F $\leq$ 80MHz
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

\*Please contact us for inquiries about Extend Operating Temperature Range (-40 to +85°C), available frequencies, other condition.