

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[AVX Corporation](#)

[K50H-3C0-SE106.250MR](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



# Clock Oscillators (SMD)

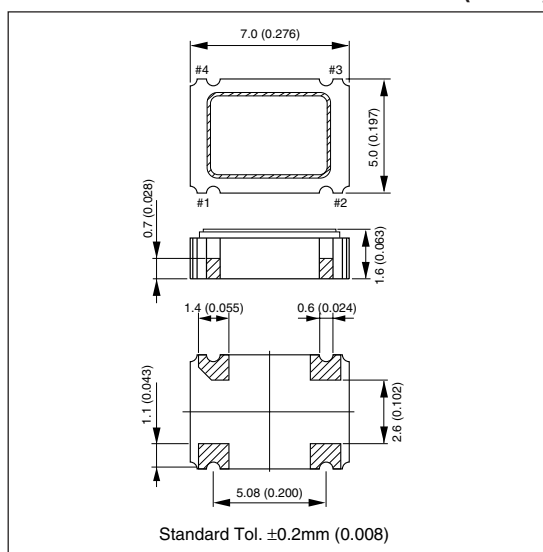
## K50H-3C Series (3.3V)

### K50 SERIES



### DIMENSIONS

millimeters (inches)



### FEATURES

- Special design package for high frequency applications
- Frequency range = 50MHz to 160MHz
- Frequency tolerance =  $\pm 100\text{ppm}$ ,  $\pm 50\text{ppm}$ ,  $\pm 25\text{ppm}$
- Tristate output inhibit
- Low jitter

### APPLICATIONS

- Fibre channel
- 10 Gigabit Ethernet
- Networking Devices

### HOW TO ORDER

**K50H - 3C 1 S E 125.000M R**

#### Packaging

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

#### Frequency (MHz)

50.0000	100.000	106.250
125.000	133.333	155.520
156.250	—	—

#### Enable/Disable Function

E = with function (STD)

#### Duty Ratio

S = 45% to 55% (STD)

#### Tolerance

1 =  $\pm 100\text{ppm}$   
 0 =  $\pm 50\text{ppm}$   
 S =  $\pm 30\text{ppm}$   
 U =  $\pm 25\text{ppm}$

#### Series

### 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>	50 to 160	MHz	—
Frequency Tolerance	$\Delta F/F$	$\pm 100$ , $\pm 50$ , $\pm 30$ , $\pm 25$	ppm	Over all conditions
Aging	$\Delta F/F$	$\pm 5.0$ , $\pm 1.5$	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>	60 max.	mA	Loaded @ 160MHz
Duty Ratio	SYM	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 Time	—	10 max.	msec	—
Disable Time	—	10 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	—

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

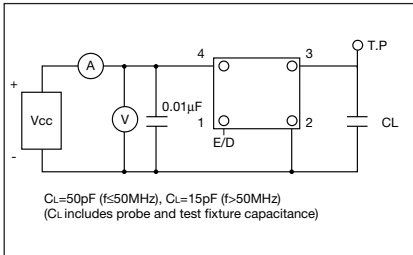


# Clock Oscillators

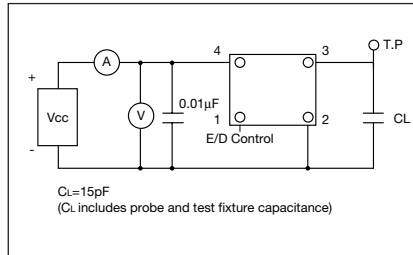
## K30/K50 Series

Kyocera has a wide range of clock oscillators with frequency and package size to match the various customer requirements.

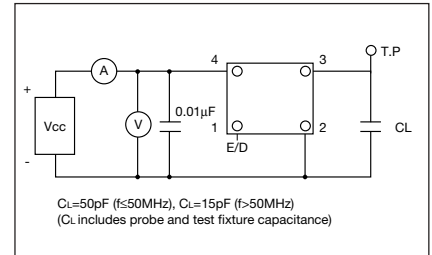
### K50/K30 HC SERIES TEST CIRCUIT



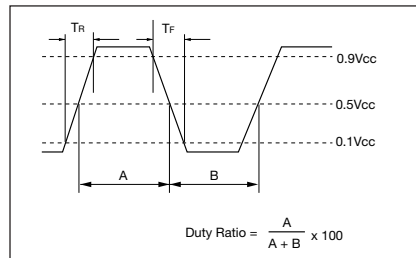
### K50/K30 3C SERIES TEST CIRCUIT



### K50H 3C SERIES TEST CIRCUIT



### OUTPUT WAVE FORM FOR ALL SERIES



## SPECIFICATIONS

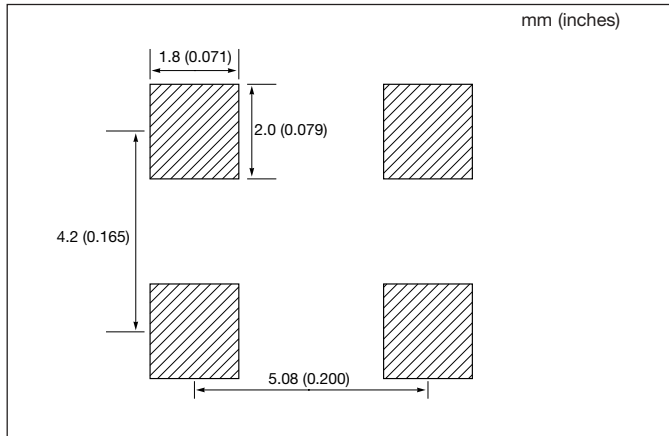
Type	Frequency Range (MHz)	Load	Drive Level	Duty Ratio	Features
K50-HC	8 to 68	CL=50pF (max.) (fo≤50MHz)	CMOS Voh=0.9Vcc Vol=0.1Vcc	45/55% (0.5Vcc)	1. IR Reflowable 2. Mini-SMD 3. Tristate Output, Enable/Disable Function F>50MHz CL=15pF
K50-3C	8 to 80	CL=15pF (max.)	CMOS Voh=0.9Vcc Vol=0.1Vcc	40/60% (0.5Vcc)	1. 3.3V Available 2. IR Reflowable 3. Mini-SMD 4. Tristate Output, Enable/Disable Function
K50H-3C	50 to 160	CL=15pF (max.)	CMOS Voh=0.9Vcc Vol=0.1Vcc	45/55% (0.5Vcc)	1. 3.3V Available 2. IR Reflowable 3. Mini-SMD 4. Tristate Output, Enable/Disable Function
K30-HC	8 to 50	CL=50pF (max.) (fo≤50MHz)	CMOS Voh=0.9Vcc Vol=0.1Vcc	45/55% (0.5Vcc)	1. IR Reflowable 2. Mini-SMD 3. Tristate Output, Enable/Disable Function
K30-3C	8 to 67	CL=15pF (max.)	CMOS Voh=0.9Vcc Vol=0.1Vcc	40/60% (0.5Vcc)	1. 3.3V Available 2. IR Reflowable 3. Mini-SMD 4. Tristate Output, Enable/Disable Function



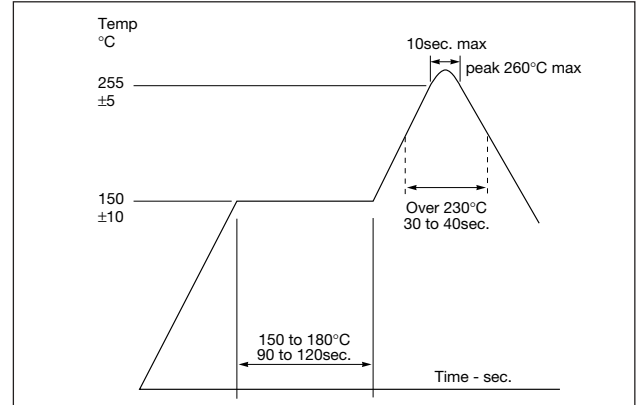
# Clock Oscillators (SMD)

## K50/K50H Series

### RECOMMENDED LAND PATTERN

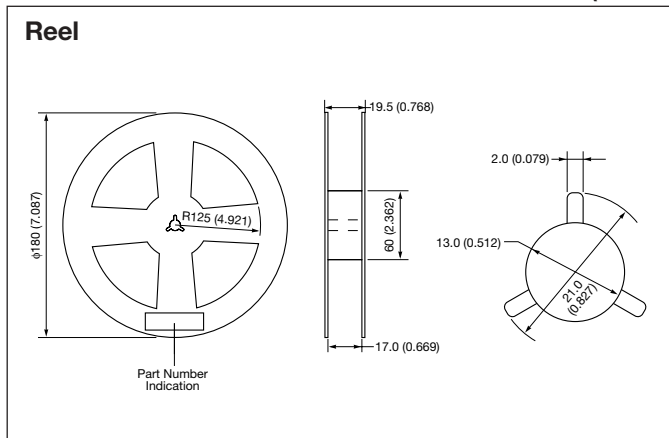


### RECOMMENDED REFLOW PROFILE (Lead Free)

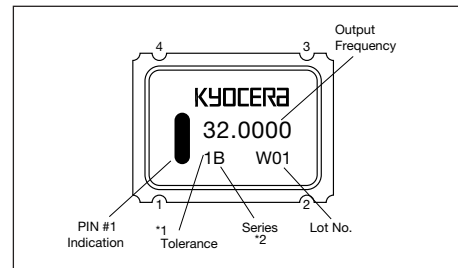


### PACKAGING

millimeters (inches)

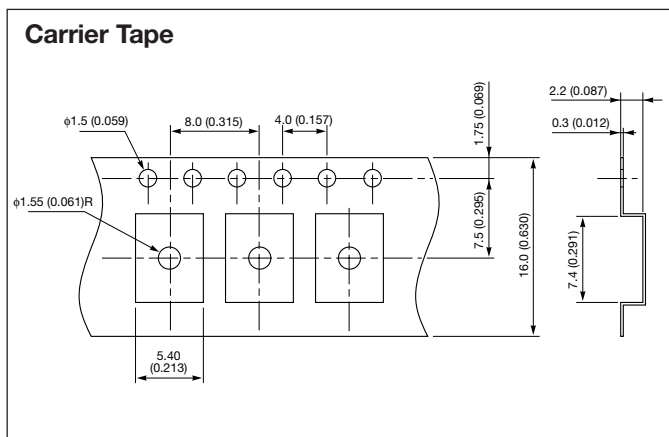


### MARKING SPECIFICATIONS



- \*1 1 = ±100ppm  
 0 = ± 50ppm  
 S = ± 30ppm  
 U = ± 25ppm
- \*2 B = K50-HC  
 L = K50-3C-E  
 M = K50-3C-SE  
 D = K50-CL  
 H = K50H-3C-SE

### Carrier Tape



### PACKAGING

1,000pcs/Reel