

Clock Oscillators (SMD)



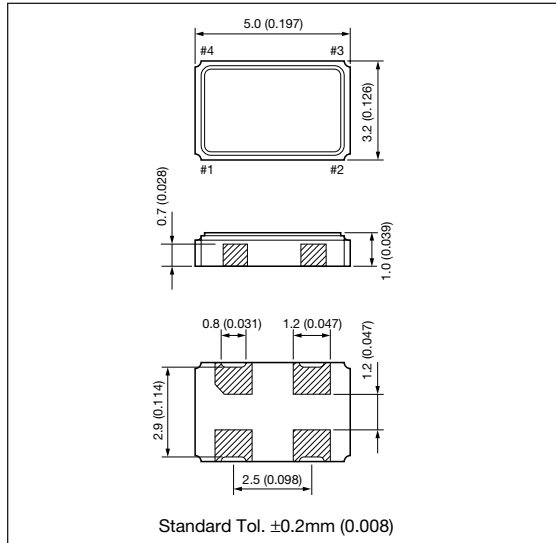
K30-3C Series (3.3V)

K30 SERIES



DIMENSIONS

millimeters (inches)



PIN CONNECTION

Pin #	Function
1	CONTROL
2	CASE GND
3	OUTPUT
4	+V _{CC}

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 _{OUT}	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 _{OPR}	-10 to 70	°C	—
Storage Temperature	T _{STR}	-55 to 125	°C	—
Supply Voltage	V _{CC}	3.3±0.3	V	—
Supply Current	I _{CC}	25 max.	mA	Loaded @ 67 MHz
Stand by Current	I _{ST}	10 max.	μA	—
Duty Ratio	SYM	40 to 60, 45 to 55	%	0.5V _{CC} DC Level
Output 0 Level	V _{OL}	0.1V _{CC} max.	V	I _{OL} = 8mA
Output 1 Level	V _{OH}	0.9V _{CC} min.	V	I _{OH} = -8mA
Rise/Fall Time	T _R , T _F	10 max.	nsec	0.1V _{CC} -0.9V _{CC}
Load Capacitance	C _L	15 max.	pF	—
Enable/Disable Time	—	5 max.	msec	—
Input Voltage Low	V _{IL}	0.3V _{CC} max.	V	—
Input Voltage High	V _{IH}	0.7V _{CC} min.	V	—
Start-up Time	ST	10 max.	mS	Minimum Operating Voltage to be 0sec

Clock Oscillators (SMD)

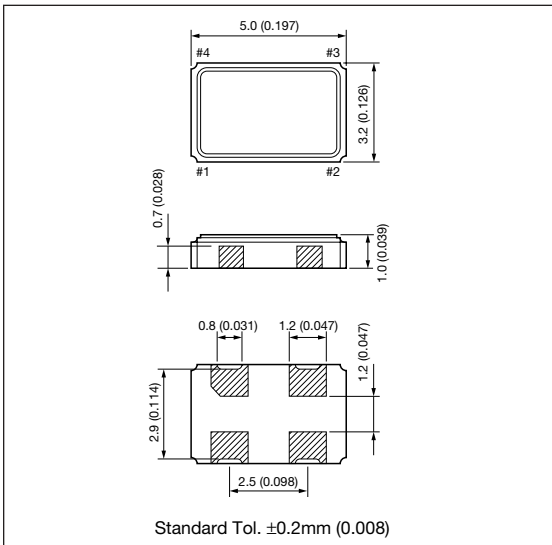


K30-3C Tight Tolerance Series (3.3V)

K30 SERIES



DIMENSIONS millimeters (inches)



PIN CONNECTION ENABLE/DISABLE

Pin #	Function
1	CONTROL
2	CASE GND
3	OUTPUT
4	+V _{CC}

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

FEATURES

- High reliable miniature SMD ceramic package
- Excellent frequency precision
- Tristate output inhibit
- Low current consumption

APPLICATIONS

- IEEE 802.11
- Wireless LAN

HOW TO ORDER

K30 - 3C U **E** **44.0000M** **R**

Packaging

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

Frequency (MHz)

13.0000	28.37516	44.0000
26.0000	28.63636	—
27.0000	32.0000	—

Enable/Disable Function

E = with function (STD)

Duty Ratio

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

Tolerance

U = $\pm 25\text{ppm}$

Series

SPECIFICATIONS

Items	Code	Rating	Unit	Remarks
Output Frequency	F _{OUT}	8 to 67	MHz	—
Frequency Tolerance	$\Delta F/F$	± 25	ppm	Over all conditions
Aging	$\Delta F/F$	± 3	ppm/y	@ 25°C
Operating Temperature	T _{OPR}	-10 to 70	°C	—
Storage Temperature	T _{STR}	-55 to 125	°C	—
Supply Voltage	V _{CC}	3.3 \pm 0.16	V	—
Supply Current	I _{CC}	25 max.	mA	Loaded @ 67 MHz
Stand by Current	I _{ST}	10 max.	μA	—
Duty Ratio	SYM	40 to 60, 45 to 55	%	0.5V _{CC} DC Level
Output 0 Level	V _{OL}	0.1V _{CC} max.	V	I _{OL} = 8mA
Output 1 Level	V _{OH}	0.9V _{CC} min.	V	I _{OH} = -8mA
Rise/Fall Time	T _R , T _F	10 max.	nsec	0.1V _{CC} -0.9V _{CC}
Load Capacitance	C _L	15 max.	pF	—
Enable/Disable Time	—	5 max.	msec	—
Input Voltage Low	V _{IL}	0.3V _{CC} max.	V	—
Input Voltage High	V _{IH}	0.7V _{CC} min.	V	—
Start-up Time	ST	10 max.	mS	Minimum Operating Voltage to be 0sec

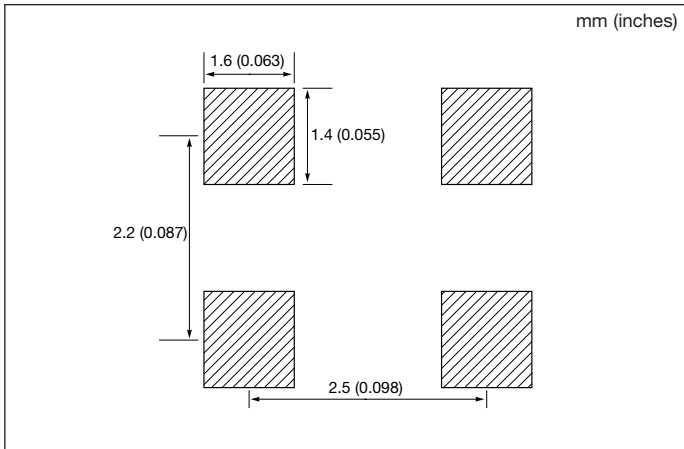
*Please contact us for inquires about Supply Voltage, other condition.

Clock Oscillators (SMD)

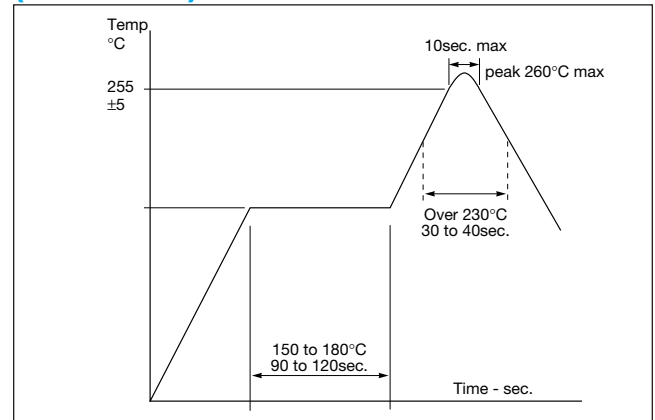


K30 Series

RECOMMENDED LAND PATTERN

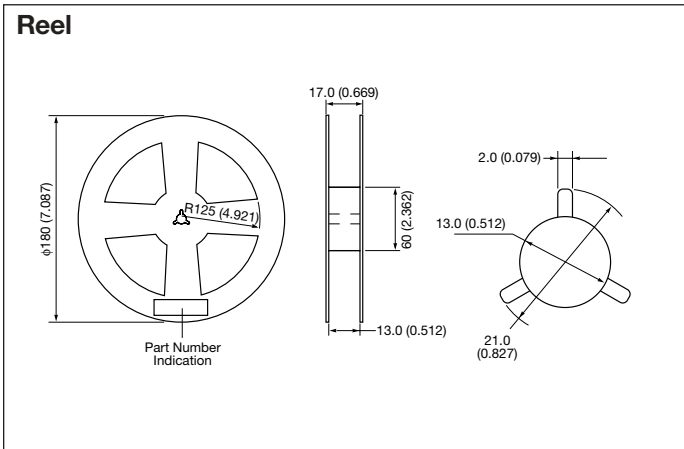


RECOMMENDED REFLOW PROFILE (Lead Free)

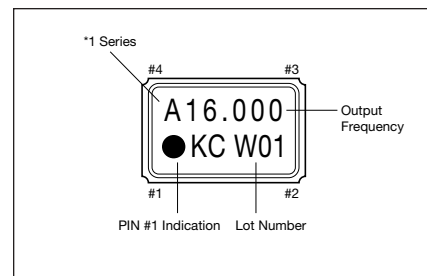


PACKAGING

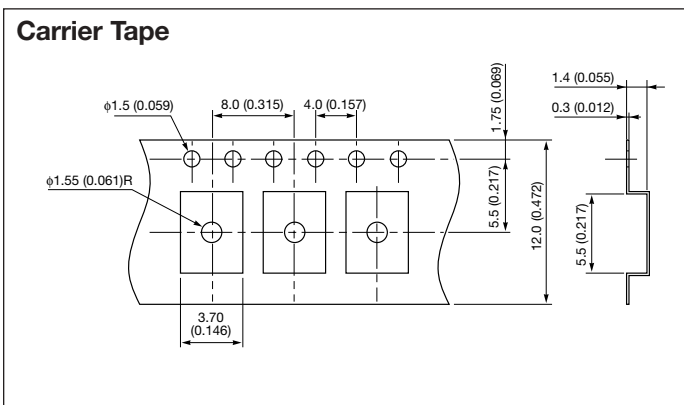
millimeters (inches)



MARKING SPECIFICATIONS



- *1 A = K30-HC1-CSE
- B = K30-HCO-CSE
- L = K30-3C1-E
- M = K30-3C0-E
- P = K30-3C1-SE
- R = K30-3C0-SE
- V = K30-3CU-E
- W = K30-3CU-SE



PACKAGING

1,000 pcs/Reel