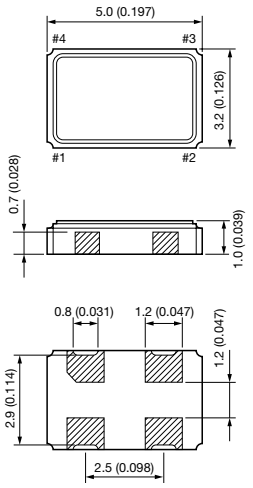
Clock Oscillators (SMD)

K30-3C Series (3.3V)

K30 SERIES

DIMENSIONS

millimeters (inches)



Standard Tol. ±0.2mm (0.008)

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

PIN CONNECTION

Pin #	Function
1	CONTROL
2	CASE GND
3	OUTPUT
4	+Vcc

ENABLE/DISABLE

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

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

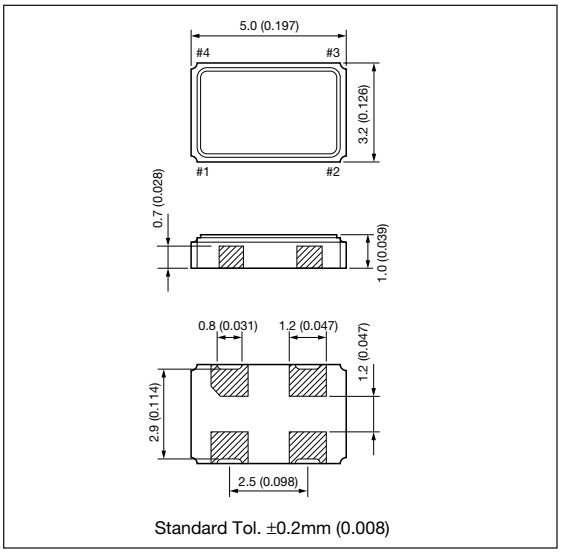
Clock Oscillators (SMD)

K30-3C Tight Tolerance Series (3.3V)

K30 SERIES

DIMENSIONS

millimeters (inches)



Standard Tol. ±0.2mm (0.008)

PIN CONNECTION

Pin #	Function
1	CONTROL
2	CASE GND
3	OUTPUT
4	+Vcc

ENABLE/DISABLE

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 = ±25ppm

Series

SPECIFICATIONS

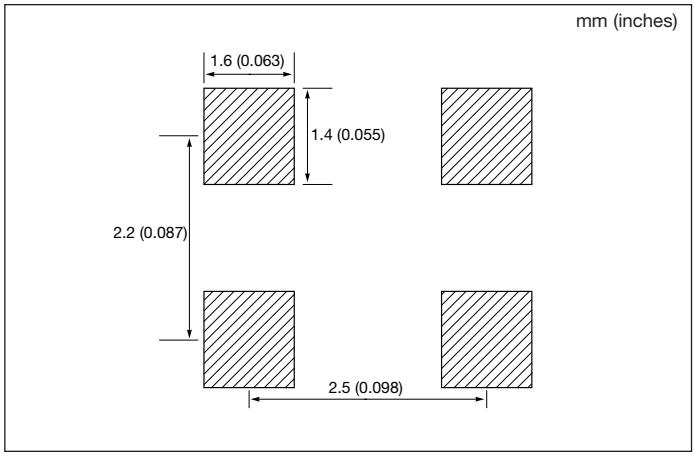
Items	Code	Rating	Unit	Remarks
Output Frequency	F_{OUT}	8 to 67	MHz	—
Frequency Tolerance	ΔF/F	±25	ppm	Over all conditions
Aging	ΔF/F	±3	ppm/y	@ 25°C
Operating Temperature	T_{OPR}	-10 to 70	°C	—
Storage Temperature	T_{STR}	-55 to 125	°C	—
Supply Voltage	V_{CC}	3.3±0.16	V	—
Supply Current	I_{CC}	25 max.	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.

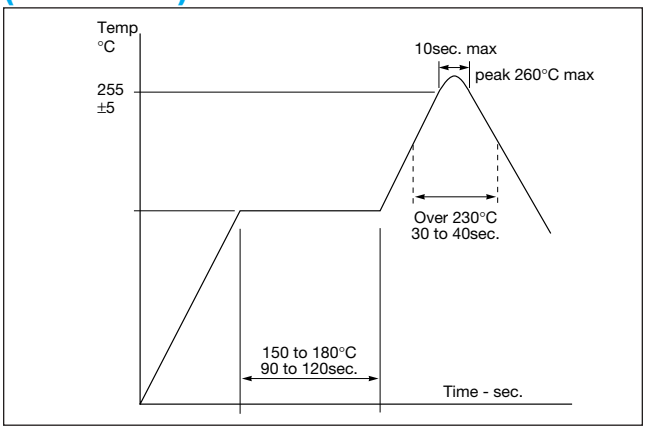
Clock Oscillators (SMD)

K30 Series

RECOMMENDED LAND PATTERN



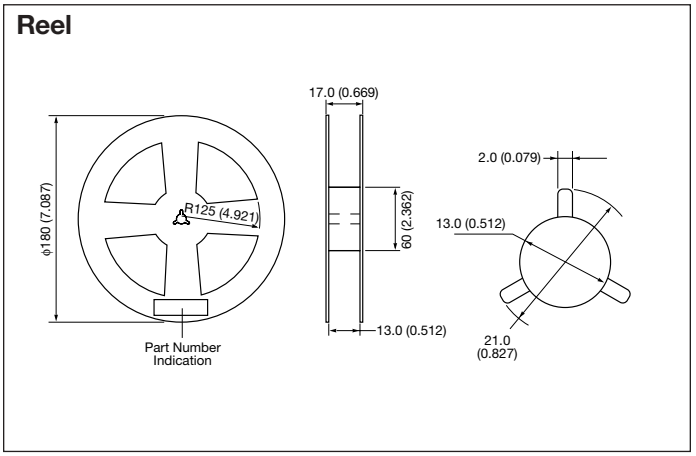
RECOMMENDED REFLOW PROFILE (Lead Free)



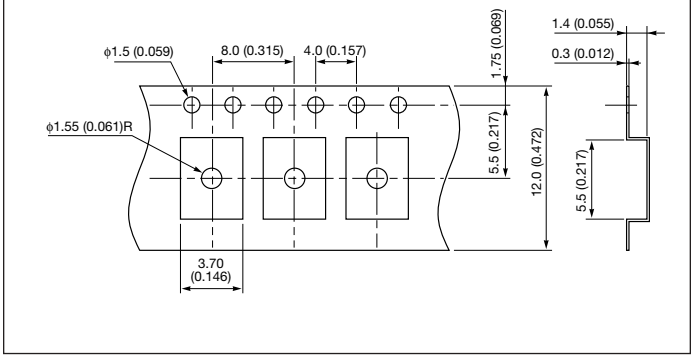
PACKAGING

millimeters (inches)

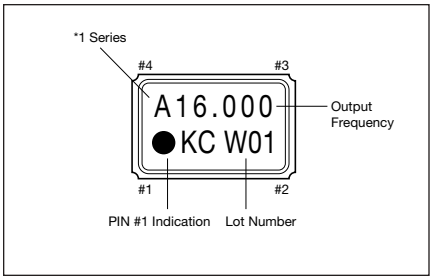
Reel



Carrier Tape



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