Crystal Clock Oscillator

NDK — Crystal Bridge to the Future

2560 Series — Low Power Supply Voltage-driving Type

■ Model name

2560TK

■ Application

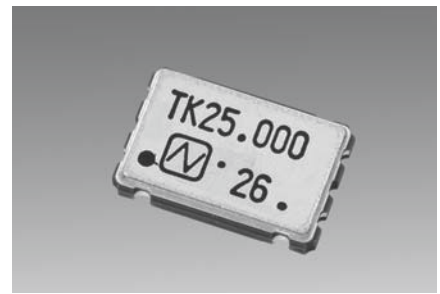- For notebook PC, mobile information terminal, and PC card

■ Features

- This surface-mount crystal clock oscillator is ultra-compact, light, and leadless. Ideal for high-density mounting.
- Supports a frequency range of 1.8 to 67 MHz.
- Automatic mounting by taping and IR reflow (lead-free) are possible.
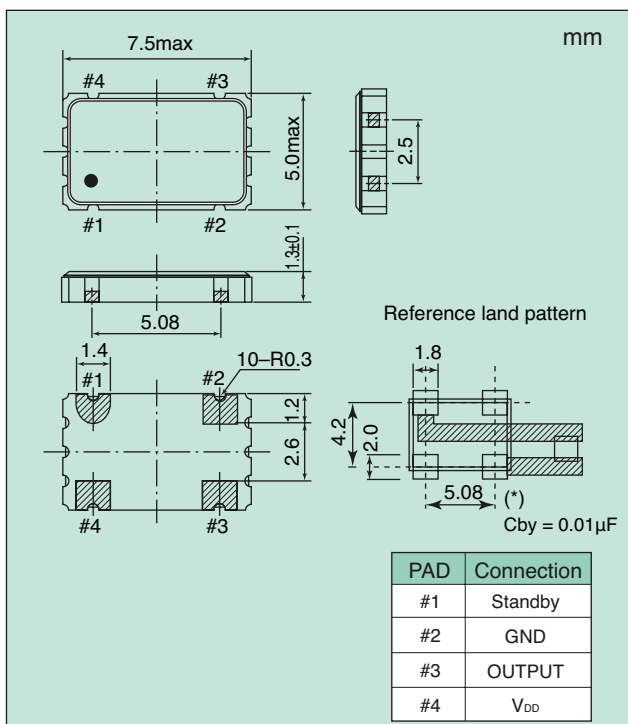- Lead-free.

Pb Free

RoHS Compliant
Directive 2002/95/EC

Absolute maximum rating
Power supply voltage (V_{DD}) -0.5 to +7.0V DC
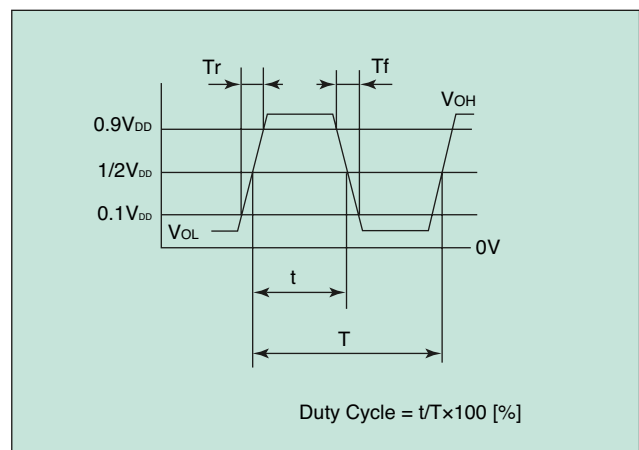Storage temperature range -55 to +125°C

■ Specifications

Item	Model	2560TK		
Output level		C-MOS		
Frequency range	(MHz)	$1.8 \leq F \leq 32$	$32 < F \leq 50$	$50 \leq F \leq 67$
Operating temperature range	(°C)	−10 to +70		
Frequency stability	($\times 10^{-6}$)	±100		
Power supply voltage	(V)	+3.3±0.3		
Consumption current (+3.3V,25°C) max	(mA)	10	15	18
V_{OL} max/V_{OH} min	(V)	$0.1V_{DD}/0.9V_{DD}$ I_{OL}=2mA I_{OH}=−2mA		
Tr max/Tf max	(ns)	6/6		
Duty Cycle min. to max.	(%)	45 to 55		
Load (C_L) max	(pF)	15		
Oscillation start time max		Available (tristate)		
Number for specifying an order		NSA3285C		

■ Dimensions

mm

7.5max
5.0max
2.5
1.3±0.1
5.08
1.4
10–R0.3
#1 #2 #3 #4
2.6
1.2
Reference land pattern
1.8
4.2
2.0
5.08
(*)
Cby = 0.01µF

PAD	Connection
#1	Standby
#2	GND
#3	OUTPUT
#4	V_{DD}

■ Output Waveform <C-MOS>

Tr   Tf
V_{OH}
$0.9V_{DD}$
$1/2V_{DD}$
$0.1V_{DD}$
V_{OL} 0V
t
T

Duty Cycle = t/T×100 [%]

■ Standby Function

#1 Input	#3 Input
Level H (0.7 V_{DD} min.) or OPEN is selected.	Oscillation output ON
Level L (0.3 VDD max.) is selected.	High impedance

■ How to Specify an Order

When ordering our products, specify them with an "Ordering Code" that consists of the following:

| Model name | – | Frequency (up to 9 digits) | M– | Number for specifying an order |

Example 1: When ordering a product with model name: 2560TK, frequency: 20 MHz, frequency stability: ±100 x 10^{-6}, and power supply voltage: 3.3 V
Ordering Code: 2560TK – 20.000000M – NSA3285C

If you have any queries concerning our standard frequencies and numbers for specifying orders, please contact our sales representatives or visit our homepage (http://www.ndk.com/).

NIHON DEMPA KOGYO CO.,LTD.