Crystal Clock Oscillator

NDK — Crystal Bridge to the Future

2725 Series — For wireless LAN

■ Model name

2725T Overall frequency tolerance of ±25 x 10^{-6}.

■ Application

● For wireless LAN

■ Features

● A high-precision type. Best suited for wireless LAN-compliant information terminal devices.
● Automatic mounting by taping and IR reflow (lead-free) are possible.
● Lead-free.
● Compact and light. Dimensions : 5.0 x 3.2 x 1.0 mm, weight : 0.06 g.

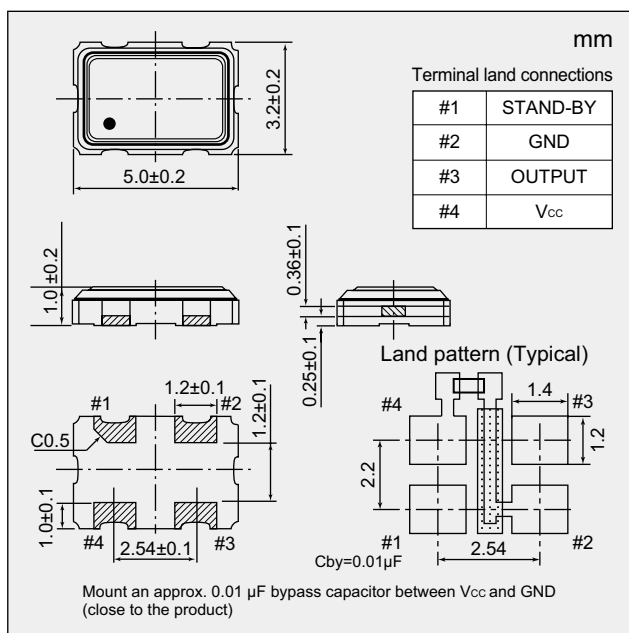Pb Free

RoHS Compliant
Directive 2011/65/EU

Absolute maximum rating
Supply voltage (V_{CC}) -0.5 to +7.0 V
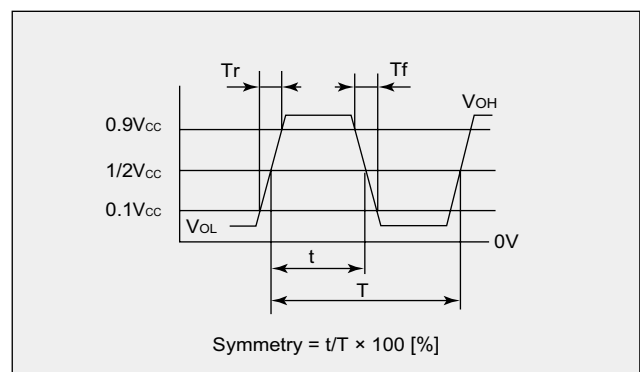Storage temperature range -55 to +125 °C

■ Specifications

Item		Model	2725T		
Output level			CMOS		
Nominal frequency range *1		(MHz)	22	40	44
Operating temperature range *2		(°C)	−10 to +70		
Overall frequency tolerance		(×10^{-6})	±25		
Supply voltage [V_{CC}]		(V)	+3.3±0.1		
Current consumption (+3.3 V, 25 °C) max	During operation	(mA)	15	22	22
	During standby	(A)	10 μ		6 m
V_{OL} max/V_{OH} min		(V)	0.1 V_{CC} /0.9 V_{CC}		
Tr max/Tf max		(ns)	5/5 (0.1 V_{CC} to 0.9 V_{CC})		
Symmetry min. to max.		(%)	45 to 55 (at 1/2 V_{CC})		
Load (C_L) max		(pF)	15		
Start-up time max		(ms)	4	10	
Standby function			Available (Three-state)		
Number for specifying an order			NSA6046A	NSA6045A	NSA6044A

*1: If you require a product with a frequency not given above, please contact us.   *2: If you require a product with an operating temperature range not given above, please contact us.

■ Dimensions

mm

Terminal land connections

#1	STAND-BY
#2	GND
#3	OUTPUT
#4	V_{CC}

3.2±0.2
5.0±0.2
1.0±0.2
0.36±0.1
0.25±0.1

Land pattern (Typical)

1.2±0.1
1.2±0.1
C0.5
1.0±0.1
2.54±0.1

#1 #2
#4 #3

#4 1.4 #3
2.2 1.2
#1 2.54 #2
Cby=0.01μF

Mount an approx. 0.01 μF bypass capacitor between V_{CC} and GND (close to the product)

■ Output Waveform <CMOS>

Symmetry = t/T × 100 [%]

■ Standby Function

#1 Input	#3 Output
Level H (0.7 V_{CC} ≤ V_{IH} ≤ V_{CC}) or OPEN is selected.	Oscillation output ON
Level L (+0.3 V_{CC} max) is selected. (22 MHz, 40 MHz)	High impedance
Level L (+0.15 V_{CC} max) is selected. (44 MHz)	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 : When ordering a product with model name: 2725T, frequency: 40 MHz, overall frequency tolerance: ±25 x 10^{-6}, and supply voltage: 3.3 V
Ordering Code: 2725T – 40.000000M – NSA6045A

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.

13A_0730_2725T_25_e