Crystal Clock Oscillator

NDK Crystal Bridge to the Future

2725N +5V Type

■ Application

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

■ Features

- CMOS IC is directly driven.
- Product height : 1.0 mm. This is equivalent to height of slim IC package(TSSOP, TVSOP).
- Current consumption during standby is 15 µA or less. (Max. 40MHz)
- Automatic mounting by taping and IR reflow (lead-free) are possible.

Pb Free

RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863

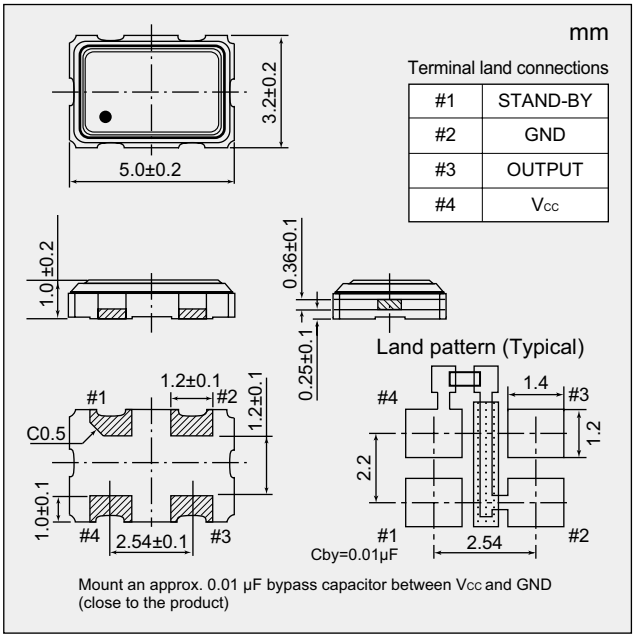
Absolute maximum rating
Supply Voltage (V_{CC}) -0.5 to +7.0 V
Storage Temperature Range -55 to +125 °C

■ Specifications

Item			Model	2725N		
Output Specification				CMOS		
Nominal Frequency Range			(MHz)	2.5 ≤ F ≤ 70		
Operating Temperature Range			(°C)	–20 to +70	–10 to +70	–10 to +60
Overall Frequency Tolerance			($\times 10^{-6}$)	±100	±50	±30
Supply Voltage [V_{CC}]			(V)	+5±10%		
Current Consumption Max.	During Operation	+25 °C	(mA)	Max. 15 (2.5 ≤ F < 20MHz) Max. 25 (20 ≤ F < 40MHz) Max. 40 (40 ≤ F < 60MHz) Max. 45 (60 ≤ F ≤ 70MHz)		
	During Standby	+25 °C	(A)	Max. 15µ (2.5 ≤ F < 40MHz) Max. 25m (40 ≤ F ≤ 70MHz)		
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.			(%)	40 to 60 at 1/2 V_{CC} (2.5 ≤ F < 40MHz) 45 to 55 at 1/2 V_{CC} (40 ≤ F ≤ 70MHz)		
Load (C_L) Max.			(pF)	15		
Start-up Time Max.			(ms)	4 (2.5 ≤ F < 40MHz) 10 (40 ≤ F ≤ 70MHz)		
Standby function				Available (Three-state)		
Specification Number				NSA6294A	NSA6294B	NSA6294C

The values of current consumption, Tr/Tf, symmetry show the standard values at CL=15pF.

■ Dimensions

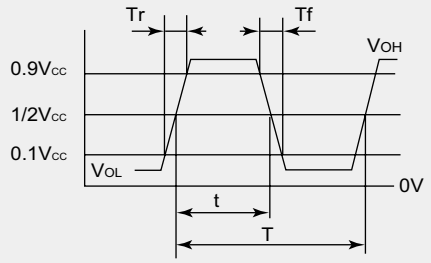


Terminal land connections

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

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 (3.5 V ≤ V_{IH} ≤ V_{CC}) or OPEN is selected.	Oscillation output ON
L level (V_{IL} ≤ 0.8 V) is selected.	High impedance

Please specify the model name, frequency, and specification number when you order products.
For further questions regarding specifications, please feel free to contact us.