

Crystal Clock Oscillator

2775 Series

Programmable Type

Model name

2775Y Frequency stability of $\pm 100 \times 10^{-6}$.

Application

- For compact mobile information equipment, such as a notebook PC, mobile information terminal, and PC card

Features

- PLL technology allows this crystal oscillator to support 1 to 181 MHz.
- With the adoption of frequency-writing technology, even the tightest delivery deadline can be met.
- Automatic mounting by taping and IR reflow (lead-free) are possible.
- Compact and light with the following dimensions and weight of 5.0 x 3.2 mm, 1.0 mm, and 0.06 g.

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

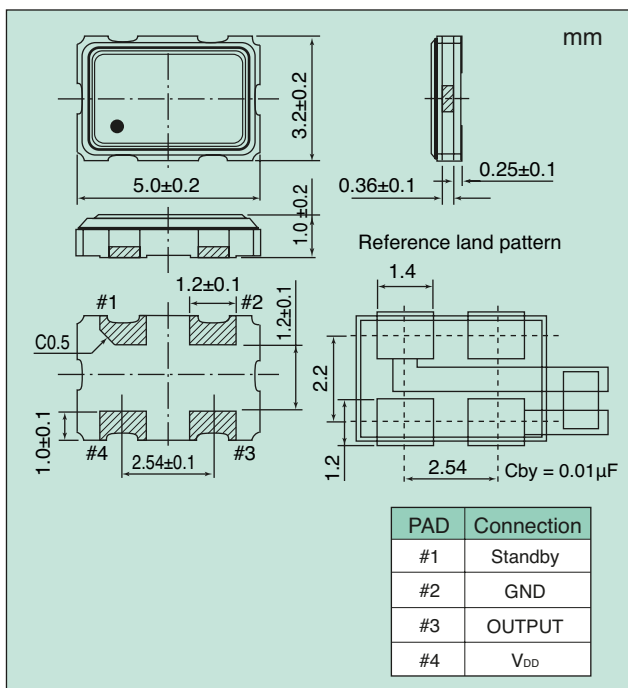


Specifications

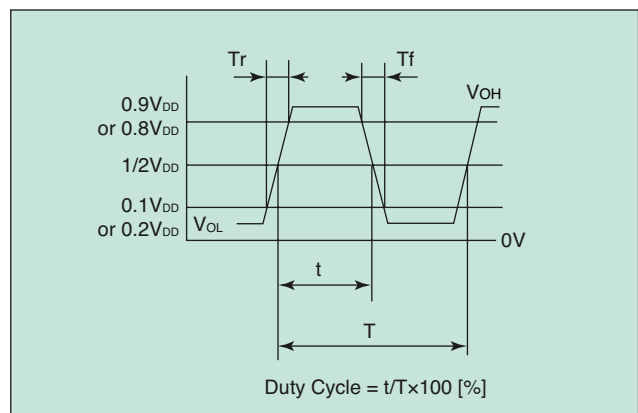
Item	Model	2775Y			
Output level		C-MOS			
Frequency range ¹	(MHz)	$1 \leq F \leq 40$	$40 < F \leq 70$	$70 < F \leq 125$	$125 < F \leq 181$
Operating temperature range ²	(°C)	-20 to +70			
Frequency stability	($\times 10^{-6}$)	± 100			
Power supply voltage	(V)	+3.3 \pm 0.3			
Consumption current	During operation	15	22	30	
	During standby	30			
V_{OL} max/ V_{OH} min	(V)	0.1V _{DD} /0.9V _{DD}		0.2V _{DD} /0.8V _{DD}	
		I _{OL} =4mA I _{OH} =-4mA			
Tr max/Tf max	(ns)	5/5 (0.1V _{DD} to 0.9V _{DD})		3/3 (0.2V _{DD} to 0.8V _{DD})	
Duty Cycle min. to max.	(%)	45 to 55 (at 1/2V _{DD})		40 to 60 (at 1/2V _{DD})	
Load (C _L) max	(pF)	15		10	
Oscillation start time max	(ms)	10			
Standby function		Available (tristate)			
Number for specifying an order		NSA5312A			

*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



Output Waveform <C-MOS>



Standby Function

#1 Input	#3 Output
Level H ($0.7 V_{DD} \leq V_{IH} \leq V_{DD}$) or OPEN is selected.	Oscillation output ON
Level L ($+0.2 V_{DD}$ max.) is selected.	High impedance (weak pull-down)

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: 2775Y, frequency: 68 MHz, frequency stability: $\pm 100 \times 10^{-6}$, and power supply voltage: 3.3 V
Ordering Code: 2775Y - 68.000000M - NSA5312A

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/>).