

Crystal Clock Oscillator



2765E Series

EMI Noise-reducing Type

Model name

2765E Frequency stability of $\pm 100 \times 10^{-6}$.

Application

- For compact mobile information equipment, such as PDA and notebook PC

Features

- With a spread spectrum function installed, this crystal oscillator effectively reduces EMI noise.
- With a standby function installed, power consumption is reduced.

Pb
Free

RoHS Compliant
Directive 2002/95/EC



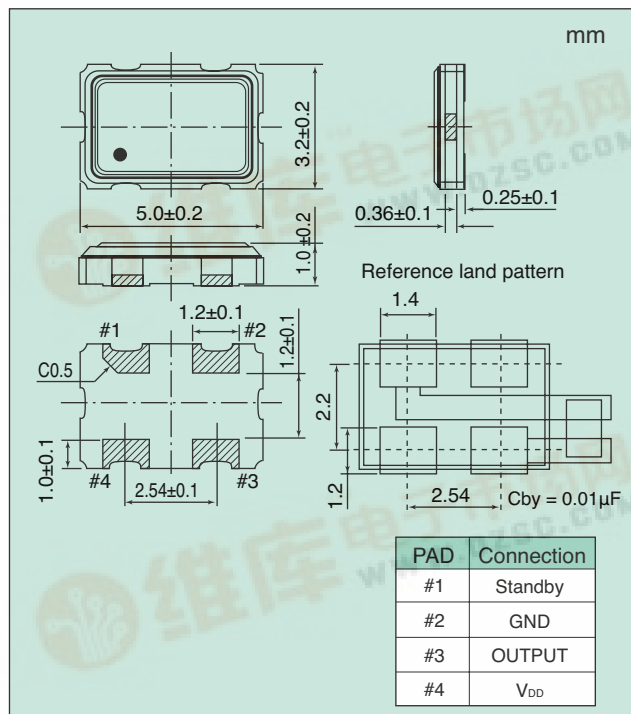
Absolute maximum rating
Power supply voltage (V_{DD}) -0.5 to +4.0V DC
Storage temperature range -55 to +125°C

Specifications

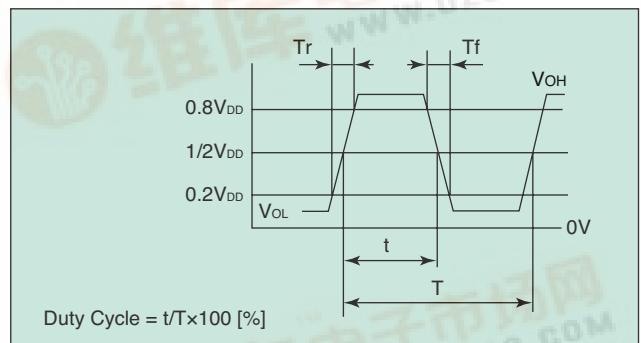
Item	Model	2765E
Output level		C-MOS
Frequency range ¹	(MHz)	$40 \leq F \leq 80$
Operating temperature range ²	(°C)	-20 to +70
Frequency stability	($\times 10^{-6}$)	± 100
Power supply voltage	(V)	+3.3 \pm 0.3
Consumption current	During operation (mA)	30
(+3.3V, 25°C) max	During standby (μ A)	30
V_{OL} max/ V_{OH} min	(V)	0.2 V_{DD} /0.8 V_{DD} I_{OL} =4mA I_{OH} =-4mA
T_r max/ T_f max	(ns)	5/5 (0.2 V_{DD} to 0.8 V_{DD})
Duty Cycle min. to max.	(%)	40 to 60 (at 1/2 V_{DD})
Load (C_L) max	(pF)	15
Oscillation start time max	(ms)	10
Standby function		Available (tristate)
Number for specifying an order		NSA3393A

*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>



Spread Spectrum Characteristics

Spreading Type	Spreading Ratio
Center spreading	$\pm 1.0\%$

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 ($V_{IL} \leq 0.3 V_{DD}$) 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: 2765E, frequency: 40 MHz, frequency stability: $\pm 100 \times 10^{-6}$, and power supply voltage: 3.3 V
Ordering Code: 2765E - 40.000000M - NSA3393A

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/>).