

Crystal Clock Oscillator

2765E Series

EMI Noise-reducing Type

Model name

2765E Overall Frequency Tolerance 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.
- Down-spreading and center-spreading.
- With a standby function installed, power consumption is reduced.

Pb Free

RoHS Compliant
Directive 2011/65/EU

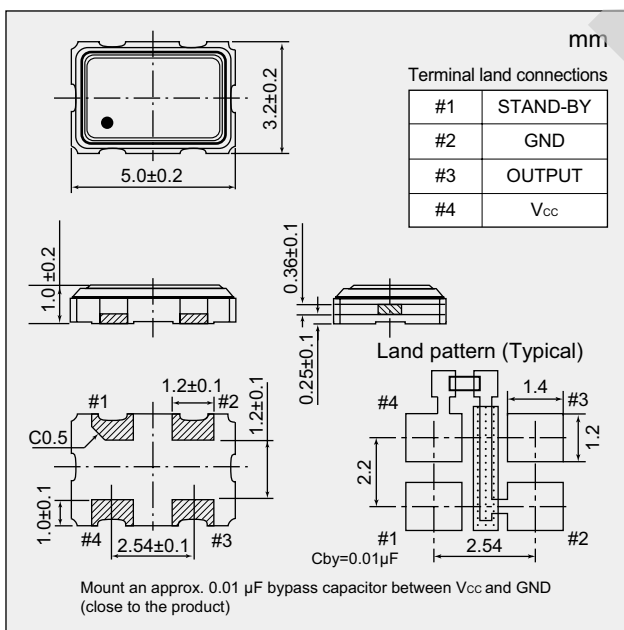
Absolute maximum rating
Supply Voltage (V_{CC}) -0.5 to +4.0 V
Storage Temperature Range -55 to +125 °C



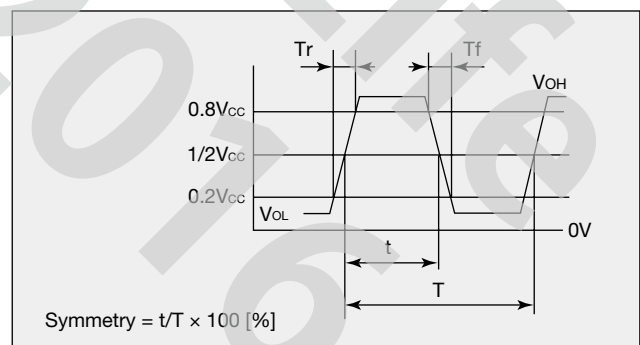
Specifications

Item	Model	2765E	
Output Level		CMOS	
Nominal Frequency Range	(MHz)	$20 \leq F \leq 80$	
Operating Temperature Range	(°C)	-20 to +70	
Overall Frequency Tolerance	($\times 10^{-6}$)	± 100	
Supply Voltage [V_{CC}]	(V)	$+3.3 \pm 0.3$	
Current Consumption (+3.3 V, +25 °C) Max.	During Operation	(mA)	30
	During Standby	(μ A)	30
V_{OL} Max. / V_{OH} Min.	(V)	$0.2 V_{CC} / 0.8 V_{CC}$	
Tr Max. / Tf Max.	(ns)	$5/5 (0.2 V_{CC} \text{ to } 0.8 V_{CC})$	
Symmetry Min. to Max.	(%)	40 to 60 (at $1/2 V_{CC}$)	
Load (C_L) Max.	(pF)	15	
Start-up Time Max.	(ms)	10	
Standby function		Available (Three-state)	
Spread Spectrum Characteristics	Spreading Type	Center spreading	
	Spreading Ratio	$\pm 1.0 \%$	$\pm 2.0 \%$
Specification Number		NSA3393A	NSA3393B

Dimensions



Output Waveform <CMOS>



Standby Function

#1 Input	#3 Output
Level H ($0.7 V_{CC} \leq V_{IH} \leq V_{CC}$) or OPEN is selected.	Oscillation output ON
Level L ($V_{IL} \leq 0.3 V_{CC}$) 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.