Crystal Clock Oscillator

NDK Crystal Bridge to the Future

2725Q Power-saving Type

■ Application

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

■ Features

- A power saving-type crystal oscillator, capable of being driven by a 2.5 V. power supply.
- 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

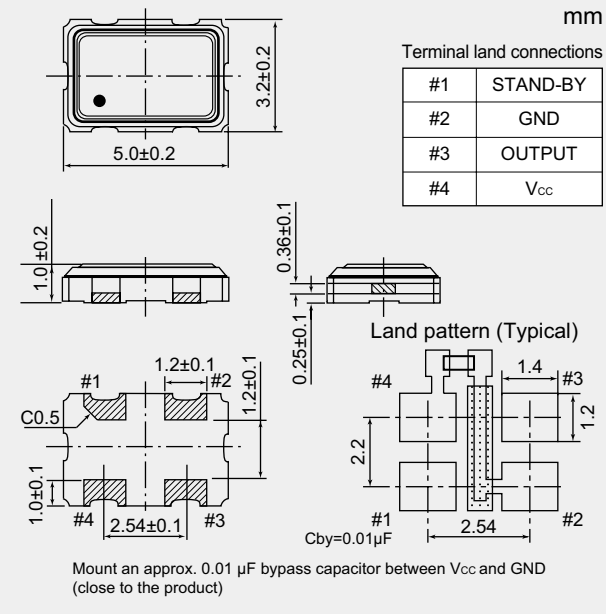
RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863

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

■ Specifications

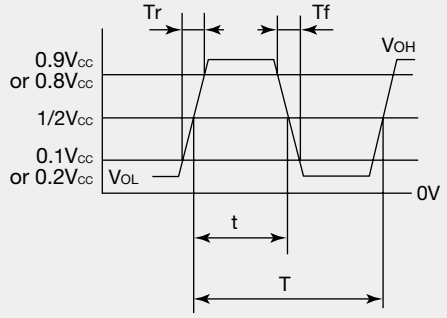
Item \ Model				2725Q	
Output Specification				CMOS	
Nominal Frequency Range			(MHz)	2.5 ≤ F ≤ 125	
Operating Temperature Range			(°C)	–20 to +70	–10 to +70
Overall Frequency Tolerance			($\times 10^{-6}$)	±100	±50
Supply Voltage [V_{CC}]			(V)	+2.5±0.1	
Current Consumption Max.	During Operation	+25 °C	(mA)	2 (2.5 ≤ F < 5MHz) 3 (5 ≤ F < 10MHz) 4 (10 ≤ F < 20MHz) 6 (20 ≤ F < 40MHz) 16 (40 ≤ F < 75MHz) 24 (75 ≤ F ≤ 125MHz)	
	During Standby	+25 °C	(μA)	10	
V_{OL} max/V_{OH} min			(V)	0.1 V_{CC}/0.9 V_{CC} (2.5 ≤ F < 75MHz) 0.2 V_{CC}/0.8 V_{CC} (75 ≤ F ≤ 125MHz)	
Tr Max. / Tf Max.			(ns)	5/5 : 0.1 V_{CC} to 0.9 V_{CC} (2.5 ≤ F < 75MHz) 4/4 : 0.2 V_{CC} to 0.8 V_{CC} (75 ≤ F ≤ 125MHz)	
Symmetry Min. to Max.			(%)	40 to 60 (at 1/2 V_{CC})	
Load (C_L) Max.			(pF)	15	
Start-up time Max.			(ms)	4 (2.5 ≤ F < 40MHz) 10 (40 ≤ F ≤ 125MHz)	
Standby function				Available (Three-state)	
Specification Number				NSA6296A	NSA6296B

■ Dimensions



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 (V_{IL} ≤ 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.