

# Crystal Clock Oscillator

## 2725N

### 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  $\mu$ A or less. (Max. 40MHz)
- Automatic mounting by taping and IR reflow (lead-free) are possible.



Pb Free

RoHS Compliant  
Directive 2011/65/EU

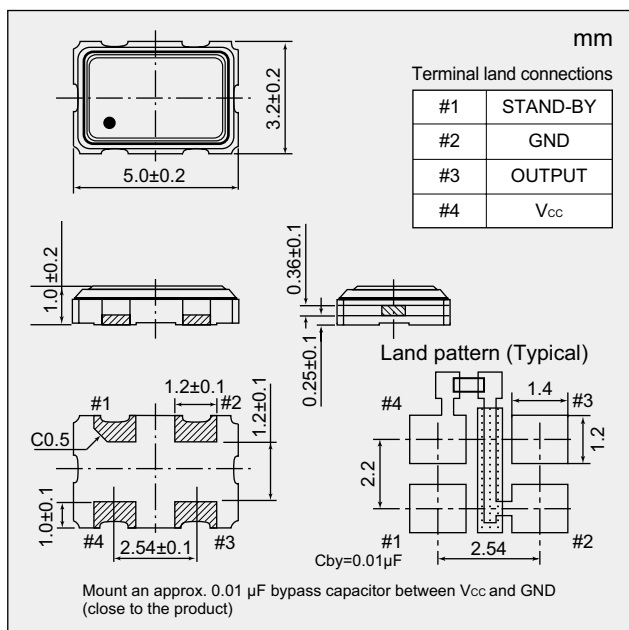
Absolute maximum rating  
Supply Voltage ( $V_{CC}$ ) -0.5 to +7.0 V  
Storage Temperature Range -55 to +125 °C

### Specifications

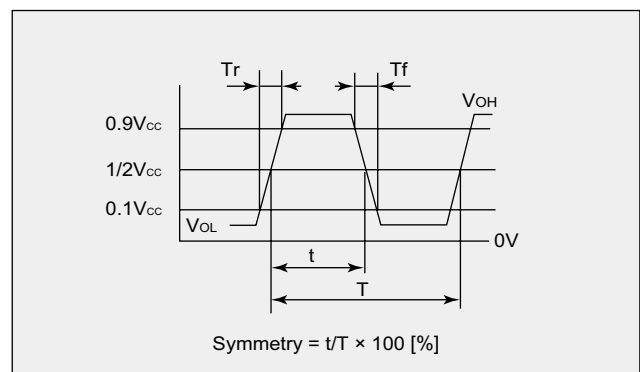
Item		Model	2725N		
Output Specification			CMOS		
Nominal Frequency Range		(MHz)	$2.5 \leq F \leq 70$		
Operating Temperature Range		(°C)	-20 to +70	-10 to +70	-10 to +60
Overall Frequency Tolerance		( $\times 10^{-6}$ )	$\pm 100$	$\pm 50$	$\pm 30$
Supply Voltage [ $V_{CC}$ ]		(V)	$+5 \pm 10\%$		
Current Consumption Max.	During Operation	+25 °C	Max. 15 ( $2.5 \leq F < 20\text{MHz}$ ) Max. 25 ( $20 \leq F < 40\text{MHz}$ ) Max. 40 ( $40 \leq F < 60\text{MHz}$ ) Max. 45 ( $60 \leq F \leq 70\text{MHz}$ )		
	During Standby	+25 °C	Max. 15 $\mu$ A ( $2.5 \leq F < 40\text{MHz}$ ) Max. 25m ( $40 \leq F \leq 70\text{MHz}$ )		
$V_{OL}$ Max. / $V_{OH}$ Min.		(V)	$0.1 V_{CC} / 0.9 V_{CC}$		
$T_r$ Max. / $T_f$ Max.		(ns)	$5/5 (0.1 V_{CC} \text{ to } 0.9 V_{CC})$		
Symmetry Min. to Max.		(%)	40 to 60 at $1/2 V_{CC}$ ( $2.5 \leq F < 40\text{MHz}$ ) 45 to 55 at $1/2 V_{CC}$ ( $40 \leq F \leq 70\text{MHz}$ )		
Load ( $C_L$ ) Max.		(pF)	15		
Start-up Time Max.		(ms)	4 ( $2.5 \leq F < 40\text{MHz}$ ) 10 ( $40 \leq F \leq 70\text{MHz}$ )		
Standby function			Available (Three-state)		
Specification Number			NSA6294A	NSA6294B	NSA6294C

The values of current consumption,  $T_r/T_f$ , symmetry show the standard values at  $C_L=15\text{pF}$ .

### Dimensions



### Output Waveform <CMOS>



### Standby Function

#1 Input	#3 Output
Level H ( $3.5 \text{ V} \leq V_{IH} \leq V_{CC}$ ) or OPEN is selected.	Oscillation output ON
L level ( $V_{IL} \leq 0.8 \text{ V}$ ) 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.