

Power-saving Type

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

- A power saving-type crystal oscillator, capable of being driven by a 1.8 V power supply.
- Current consumption during standby is 3 μ A or less.
- 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

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

| | | | | |
|---|------------------|--------|----------------------|---|
| Item | | | Model | 2725Z |
| Output Level | | | | CMOS |
| Nominal Frequency Range | | | (MHz) | $2.5 \leq F < 40$ |
| Operating Temperature Range | | | (°C) | -20 to +70 |
| Overall Frequency Tolerance | | | ($\times 10^{-6}$) | ± 100 |
| Supply Voltage [V _{CC}] | | | (V) | +1.8 \pm 0.1 |
| Current Consumption Max. | During Operation | +25 °C | (mA) | 2 (Typ. 1mA) |
| | During Standby | +25 °C | (μ A) | 3 |
| V _{OL} Max. / V _{OH} Min. | | | (V) | 0.1 V _{CC} / 0.9 V _{CC} |
| Tr Max./ Tf Max. | | | (ns) | 6/6 (0.1 V _{CC} to 0.9 V _{CC}) |
| Symmetry Min. to Max. | | | (%) | 40 to 60 (at 1/2 V _{CC}) |
| Load (C _L) Max. | | | (pF) | 5 |
| Start-up Time Max. | | | (ms) | 4 |
| Standby function | | | | Available (Three-state) |
| Specification Number | | | | NSA6297A |

mm

Terminal land connections

| | |
|----|-----------------|
| #1 | STAND-BY |
| #2 | GND |
| #3 | OUTPUT |
| #4 | V _{CC} |

Land pattern (Typical)

Mount an approx. 0.01 μ F bypass capacitor between V_{CC} and GND (close to the product)

The diagram shows a square wave signal with the following parameters:

- High Level:** $0.9V_{CC}$
- Low Level:** $0.1V_{CC}$
- Transition Levels:** $1/2V_{CC}$ and V_{OL}
- Maximum Voltage:** V_{OH}
- Minimum Voltage:** $0V$
- Rise Time (T_r):** Time from $0.1V_{CC}$ to $0.9V_{CC}$.
- Fall Time (T_f):** Time from $0.9V_{CC}$ to $0.1V_{CC}$.
- Period (T):** Time for one complete cycle.
- Duty Cycle (t):** Time the signal is in the high state.

The formula for Symmetry is given as:

$$\text{Symmetry} = t/T \times 100 [\%]$$

| #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.