



**THE DATASHEET OF**  
**FL1400001**







A product Line of  
Diodes Incorporated



**FL Series Quartz Crystal**  
**Legacy NKS3 Series | 3.2 x 2.5mm**

## Frequency Range:

- 8 MHz to 66.0000 MHz (Fundamental)

## Characteristics at 25°C ±2°C:

- Frequency Calibration Tolerance: ±10ppm, ±20ppm, or ±30ppm
- Load Capacitance: 8 to 32pF or Series Resonance
- Effective Series Resistance (ESR):
  - 500Ω max (8 to 11.9 MHz)
  - 80Ω max (12 to 19.9 MHz)
  - 60Ω max (20 to 29.9 MHz)
  - 40Ω max (30 to 66 MHz)
- Drive Level: 10μW typ. (100μW max)
- Shunt Capacitance: 5pF Max

## Temperature Range:

- Operating: -20 to +70°C or -40 to +85°C or -40 to +125°C
- Storage: -55 to +125°C

## Temperature Stability:

- ±10ppm, ±20ppm, ±30ppm, or ±50ppm (-20 to +70°C)
- ±30ppm, or ±50ppm (-40 to +85°C)
- ±50ppm, or ±70ppm (-40 to 125°C)

## Aging at 25°C, First Year:

- ±3ppm Max

## Reflow Temperature:

- 260°C Max, 10 seconds Max

## Mechanical

- Shock: JESD22-B104 Condition B
- Solderability: J-STD-002
- Terminal Strength: MIL-STD-883 Method 2004
- Vibration: JESD22-B103
- Solvent Resistance: JESD22-B107
- Resistance to Soldering Heat: J-STD-020C Table 5-2 Pb-free devices (3 cycles max)

## Environmental

- Gross Test Leak: JESD22-A109, Condition C
- Fine Test Leak: JESD22-A109, Condition A1
- Moisture Resistance: JESD22-A113
- Insulation Resistance: 500 MΩ min (100 VDC)

## Legacy Ordering Information - For Reference Only:





### Part Number Example:

Spec: Freq 18.1234MHz, ±30ppm calib, ±30ppm stab, -20 to +70°C, 16pF, T&R = NKS3NAD1-18.1234-16(T)

## Looking for pricing, stock, or lifecycle information?

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-  [View FL1400001 on WIN SOURCE](#)
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