

NF8 Series

SMD Crystal

Size, mm

8.0 x 4.5 x 1.5

Frequency Stability

±30 PPM

Temperature Range

-10°C to 70°C

Frequency Range

8.0-80.0 MHz

Features

- Meets NEL requirements for product reliability
- User specified tolerance available
- Leadless ceramic package
- Suitable for reflow soldering
- Wide frequency range 8.0 MHz to 80.0 MHz
- Automatic mounting
- Shock resistance: drop test of 3 times on 2 mm stainless plate from 75 cm height
- Glass sealed



For the most up to date specifications on each NEL product, log on to our website—www.nelfc.com

SMD Crystal NF8 Series

Frequency Range: 8.0 MHz to 80.0 MHz

Creating a Part Number

N F8 - 80.000 - X - X - X - X - X

NEL Type
8.0 x 4.5 x 1.5 mm - 2 pad

Frequency (MHz)
Frequency Tolerance @25°C

A: ±30 ppm
B: ±50 ppm
X: Specify

Load Capacitance
Series, 16 pF, 20 pF, 30 pF, 32 pF, Specify

Frequency Stability

A: ±30 ppm
B: ±50 ppm
X: Specify

Operating Temp. Characteristics

A: -10° to 70°C
B: -20° to 70°C

Aging

A: ±3 ppm/year
B: ±5 ppm/year

Electrical Specifications

Frequency Range	8.000 MHz to 80.000 MHz	
Frequency Tolerance (at 25°C)	±30 ppm, ±50 ppm, or specify	
Frequency Stability Over	-10°C to 70°C ±30 ppm	
Operating Temp. Characteristics	-20°C to 70°C ±50 ppm or specify	
Storage Temperature	-55°C to 125°C	
Operating Temperature Range	-40°C to 85°C	
Shunt Capacitance	5.0 pF Max	
Drive Level (Typical)	10 µW	
Load Capacitance (C _L)	Series, 16 pF, 20 pF, 30 pF, 32 pF or specify	
Aging @ 25°C 1st year (Max)	±3 ppm, ±5 ppm/year	
Equivalent Series Resistance	Frequency Range	E.S.R. (Ω) Max
Mode: Fundamental/AT	8.000 to 10.000 MHz	70
	10.000 to 40.000 MHz	40
Mode: 3rd Overtone/AT	30.000 to 45.000 MHz	60
	45.000 to 80.000 MHz	50

Drawing Specifications

Top View Dimensions: 8.0±0.2 mm (width), 4.5±0.2 mm (height), 1.5 Max. mm (thickness).

Bottom View Dimensions: 1.5±0.2 mm (width), 2.0±0.2 mm (height).

Connection (Top View): Shows two pads with a distance of 1.4 mm between them.

Suggested Pad Layout (Top View): Shows a central pad of 4.0 mm width and 3.0 mm height, with 2.5 mm spacing to the edges.

Dimensions shown in millimeters.