

# NF9 Series

SMD Crystal

## Size, mm

5.0 x 3.2 x 1.3

## Frequency Stability

±30 PPM

## Temperature Range

-10°C to 70°C

## Frequency Range

12.0-40.0 MHz

## Features

- Meets NEL requirements for product reliability
- User specified tolerance available
- Leadless ceramic package
- Suitable for reflow soldering
- Wide frequency range 12.0 MHz to 40.0 MHz
- Automatic mounting
- Shock resistance: drop test of 3 times on 2 mm stainless plate from 75 cm height
- Glass sealed

# SMD Crystal NF9 Series

Frequency Range: 12.0 MHz to 40.0 MHz

Rev. A

## Creating a Part Number

N F9 - 30.000 - X - X - X - X

NEL

## Type

5.0 x 3.2 x 1.3 mm - 2 pad

## Frequency (MHz)

Frequency Tolerance @25°C

A: ±30 ppm

X: Specify

## Load Capacitance

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

## Frequency Stability

A: ±30 ppm

B: Specify

## Aging

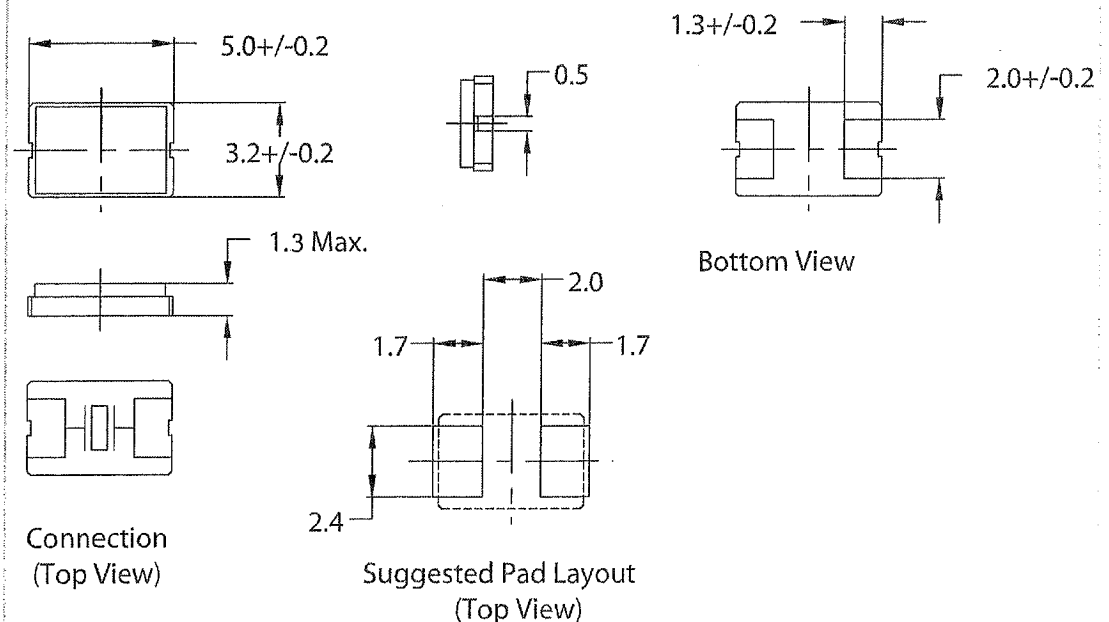
A: ±3 ppm/year

B: ±5 ppm/year

## Electrical Specifications

Frequency Range	12.000 MHz to 40.000 MHz	
Frequency Tolerance (at 25°C)	±30 ppm, or specify	
Frequency Stability Over	-10°C to 70°C ±30 ppm	
Operating Temp. Characteristics	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)	50 µW	
Load Capacitance (C <sub>L</sub> )	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	12.000 to 30.000MHz	60
	30.000 to 40.000MHz	45

## Drawing Specifications



For the most up to date specifications on each NEL product, log on to our website—[www.nelco.com](http://www.nelco.com)

Dimensions shown in millimeters.