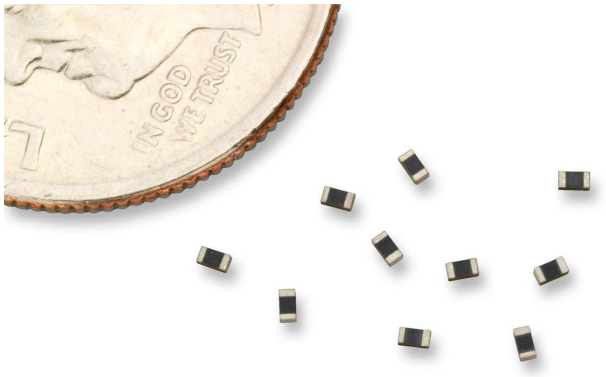
Surface Mount Thermistors
NSRA Series

End-Banded NTC Thermistor

REACH RoHS



Description

The NSRA series surface-mount, end-banded chip thermistors are designed for use on hybrid substrates, integrated circuits, and printed circuit boards. They have a solder-coated metallization that is suitable for various contact techniques including wire bond, epoxy, or solder. Since these thermistors are manufactured using the most advanced equipment and technology available, their dimensional parameters are extremely uniform making them especially suitable for use with automatic handling and placement equipment. The NSRA series offers a highly reliable structure and exceptional accuracy. Options include non-standard resistance values and tolerances as well as tape and reel packaging. These thermistors are used in a variety of industrial applications.

Features

- Surface-mountable
- Wide resistance range
- Highly reliable structure
- EIA size: 0402
- Rated to 125 °C operating temperature
- Small size
- Nickel barrier
- Extremely accurate values
- Low cost

Benefits

- Efficient
- Cost-effective
- Small components/small footprint
- Simpler and faster operation for automated assembly
- Improved mechanical performance
- Design flexibility

Applications

- Battery packs
- Automotive electronics
- Mobile communication devices
- Consumer electronics
- Household electronics
- Medical equipment
- Industrial electronics and automation

Revised: 06/14/2023

Specifications

PART NUMBER	RESISTANCE IN OHMS AT 25 °C (Ω)	RESISTANCE TOLERANCE ± % @ 25 °C	BETA K 0–50 °C	OPERATING TEMPERATURE MAX °C	TEMPERATURE COEFFICIENT @ 25 °C	RESISTANCE-TEMPERATURE CURVE
NSRA103F3J2FET001	10000	1	3320	125	-3.82% / °C	E1

Certification & Compliance

REACH	Reach Regulation (EC) No. 1907/2006
RoHS	RoHS 2 Directive 2011/65/EU; Directive (EU) 2015/863

Part Numbering System

NSRA 103 F 3J2 F E T 0 01

- **Product Series** — SMD 0402
- **Resistance** — +25 °C - 10,000 Ω
- **Resistance Tolerance** — ±1%
- **Beta Value/ß Temperature Range** — ß3435 °K, 25 °C to +85 °C
- **Beta Tolerance** — ±1%
- **Temperature Range** — -40 °C to +125 °C
- **Packaging** — Tape/Reel
- **No Special Rating**
- **Internal Suffix**

Ordering Information

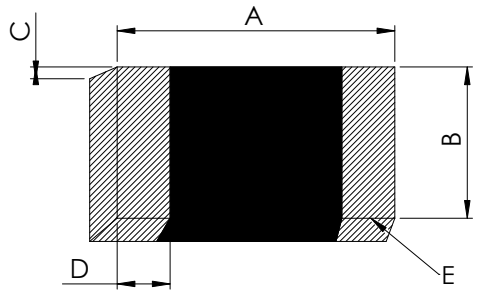
CATALOG NUMBER	PACKAGING	QUANTITY
NSRA103F3J2FET001	Tape/Reel	10000 pcs

Electrical Specifications

RESISTANCE (25 °C) Ω	RESISTANCE TOLERANCE, ±%	TEMP, COEFFICIENT (%/°C)	BETA (K)	TEMP RATING (°C)	POWER RATING (V)
100 to 100000	1 to 10	3.31 to 4.4	2000 ~ 5000	-55 ~ +150	300 ~ 400

Revised: 06/14/2023

Dimensions Inches (mm)



A	B	C	D
0.0394" ± 0.008" (1.0007 ± 0.3048 mm)	0.0197" ± 0.008" (0.5003 to 0.2032 mm)	0.028" Max (0.7112 mm Max)	0.0079" ± 0.004"(2X) (0.2006 ± 0.1016 mm (2X))