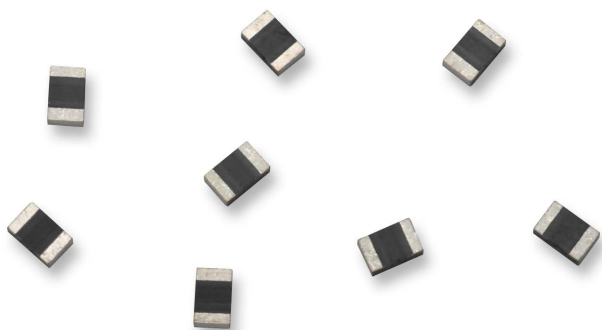


# Surface Mount Thermistors

## NSKR Series

End-Banded NTC Thermistor

REACH RoHS



### Description

The NSKR 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 the devices especially suitable for use with automatic handling and placement equipment. The NSKR 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: 0805
- Rated to 125 °C operating temperature
- Small size
- Nickel barrier
- Extremely accurate values

### Benefits

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

### Applications

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

# Surface Mount Thermistors

## NSKR Series

### 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 |
|-------------------|---------------------------------|----------------------------------|----------------|------------------------------|---------------------------------|------------------------------|
| NSKR103F3J2FET001 | 10000                           | 1                                | 3330           | 125                          | -3.82% / °C                     | E1                           |
| NSKR103J3J2NET001 | 10000                           | 5                                | 3320           | 125                          | –                               | E1                           |
| NSKR103J3Q2NET001 | 10000                           | 5                                | 3569           | 125                          | –                               | G                            |
| NSKR473J3V2FET001 | 47000                           | 5                                | 3909           | 125                          | –                               | J                            |
| NSKR503J4C2NET001 | 50000                           | 5                                | 4024           | 125                          | –                               | L                            |
| NSKR680J2R2NET001 | 68                              | 5                                | 2773           | 125                          | –                               | B                            |

### Certification & Compliance

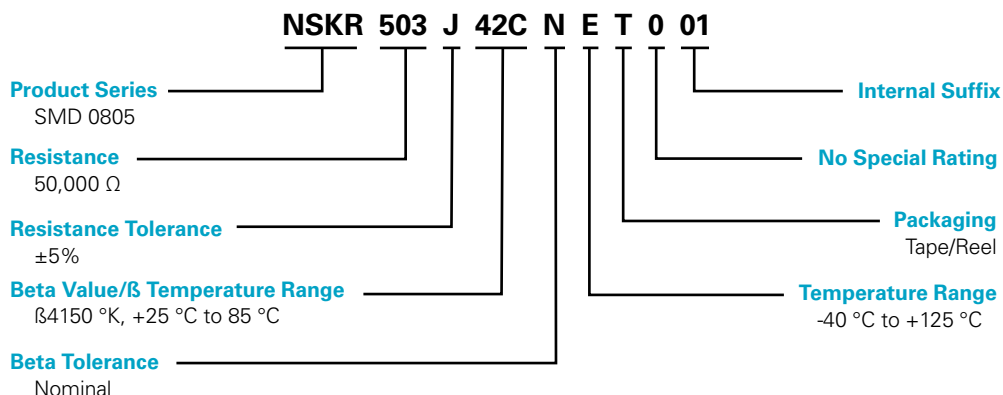
#### REACH

Reach Regulation (EC) No. 1907/2006

#### RoHS

RoHS 2 Directive 2011/65/EU; Directive (EU) 2015/863

### Part Numbering System



### Ordering Information

| CATALOG NUMBER    | PACKAGING | QUANTITY |
|-------------------|-----------|----------|
| NSKR103J3Q2NET001 | Tape/Reel | 3500 pcs |
| NSKR503J4C2NET001 | Tape/Reel | 3500 pcs |
| NSKR103F3J2FET001 | Tape/Reel | 4000 pcs |
| NSKR473J3V2FET001 | Tape/Reel | 3500 pcs |
| NSKR680J2R2NET001 | Tape/Reel | 5000 pcs |
| NSKR103J3J2NET001 | Tape/Reel | 3500 pcs |

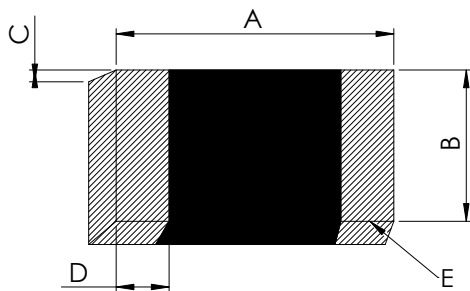
# Surface Mount Thermistors

## NSKR Series

### Electrical Specifications

| RESISTANCE<br>(25 °C) $\Omega$ | RESISTANCE<br>TOLERANCE, $\pm\%$ | TEMP. COEFFICIENT<br>(%/°C) | BETA (K)    | TEMP RATING (°C) | POWER RATING (V) |
|--------------------------------|----------------------------------|-----------------------------|-------------|------------------|------------------|
| 100 to 1000000                 | 1 to 10                          | 3.31 to 4.4                 | 2000 ~ 5000 | -55 ~ +150       | 300 ~ 400        |

### Dimensions Inches (mm)



| A                                               | B                                            | C                         | D                                       | E                               |
|-------------------------------------------------|----------------------------------------------|---------------------------|-----------------------------------------|---------------------------------|
| 0.076" $\pm$ 0.008"<br>(1.9304 $\pm$ 0.2032 mm) | 0.049" $\pm$ 0.008"<br>(1.2446 to 0.2032 mm) | 0.055" Max<br>(1.397 Max) | 0.008" Min (2X)<br>(0.2032 mm Min (2X)) | Solder Plated Terminations Ends |

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