

# Surface Mount Thermistors

## NSS Series

MELF-Style, Glass-Encapsulated

REACH RoHS



### Description

The NSS series surface-mount, MELF-style, glass-encapsulated thermistors are manufactured using exceptionally stable NTC chips that are hermetically sealed in a glass package. MELF stands for Metal Electrode Leadless Face, which is a reference to a type of leadless cylindrical electronic surface mount device that is metallized at its ends. The NSS series consists of two terminals bonded into a cylindrical body. The result is an extremely reliable surface-mount package that can withstand the most severe environmental conditions. These thermistors exhibit excellent long-term reliability and stability and are well-suited for applications where their interchangeability eliminates the necessity for costly individual circuit calibration. Their uniform dimensions make them especially useful with automatic insertion equipment. These thermistors are very cost-effective and are available with options such as non-standard resistance values and tolerances, tape and reel packaging, and point-matching at specified temperatures for consistent performance.

### Features

- Moisture proof
- Miniature/practical design
- Higher density for connections
- Excellent long-term stability
- High temperature capability to +220 °C
- Surface-mountable
- Low cost

### Benefits

- High reliability
- Fast response time
- Efficient
- Cost-effective
- Superior mechanical performance
- Automated simplified production
- Consistent performance

### Applications

- Consumer technology
- Household electronics
- Heating and air-conditioning
- Industrial electronics and automation
- High temperature printer ink sensing
- Printed circuit board temperature sensing

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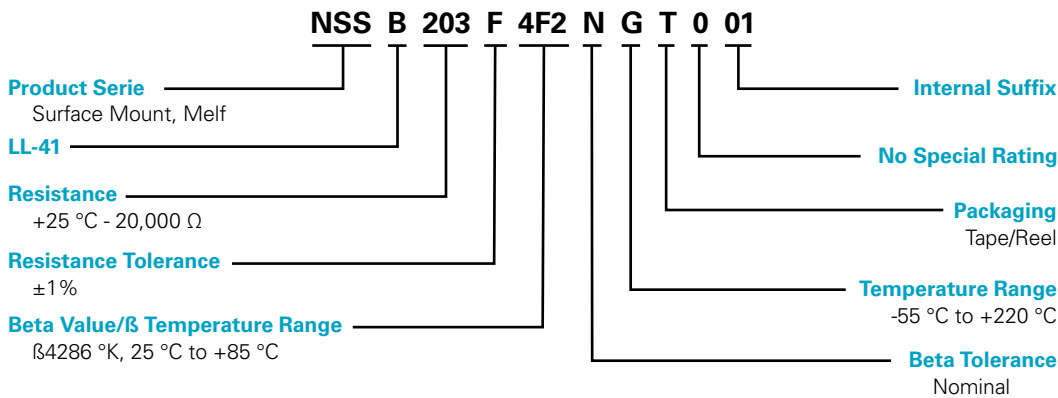
### Specifications

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
NSSB203F4F2NGT001	20000	1	-	220	-	R
NSSM103K3T1NGT001	10000	10	3892	220	-4.4% / °C	J
NSSM103M3T1NHT001	10000	Nom	3892	220	-4.4% / °C	J

### Certification & Compliance

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

### Part Numbering System



### Ordering Information

CATALOG NUMBER	PACKAGING	QUANTITY
NSSB203F4F2NGT001	Tape/Reel	5000 pcs, 1500 pcs
NSSM103K3T1NGT001	Tape/Reel	2500 pcs
NSSM103M3T1NHT001	Tape/Reel	2500 pcs

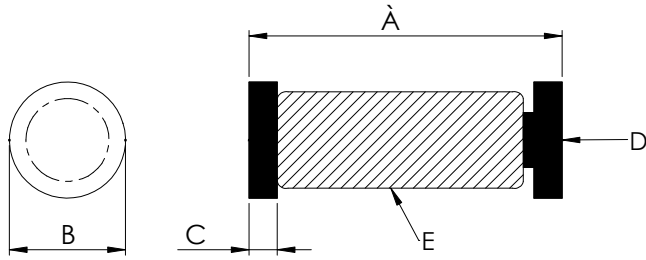
### Electrical Specifications

RESISTANCE (25 °C) Ω	RESISTANCE TOLERANCE, ±%	TEMP. COEFFICIENT (%/°C)	BETA (K)	TEMP RATING (°C)	THERMAL TIME CONSTANT (SEC)	DISSIPATION CONSTANT (MW/°C)
1000 to 2000000	1 to 10	3.31 to 4.4	2000 ~ 5000	-40 ~ +220	8 Max	2 ~ 3

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### Dimensions Inches (mm)



A	B	C	D	E
0.075" ± 0.008" to 0.197" ± 0.012" (1.905 ± 0.2032 mm to 5.0038 ± 0.3048 mm)	0.049" ± 0.004" to 0.096" ± 0.008" (1.2446 to 0.1016 mm to 2.4384 to 0.2032 mm)	0.0075" ± 0.004" to 0.016" ± 0.008" (0.1905 to 0.1016 mm to 2.4384 to 0.4064 mm)	Tinned Dumet Tab (2X)	Glass Encapsulation

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