

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

Surface Mount Thermistors

NSS Series

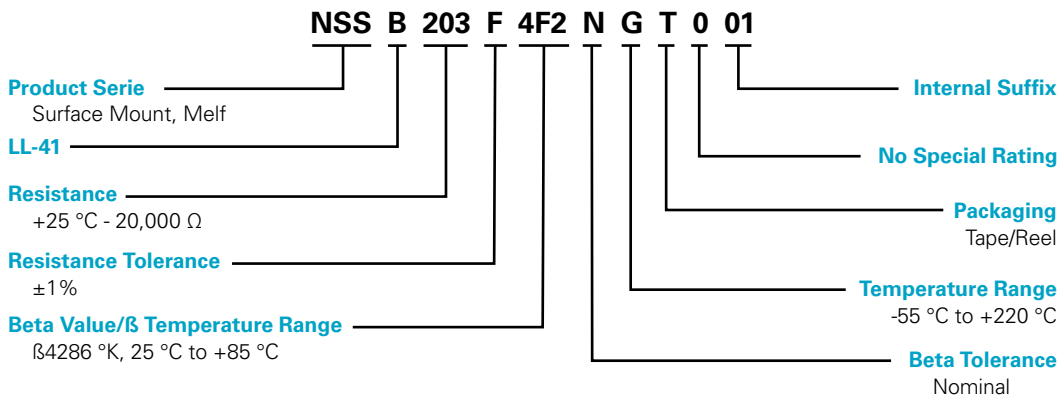
Specifications

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
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

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
NSSB203F4F2NGT001	Tape/Reel	5000 pcs, 1500 pcs
NSSM103K3T1NGT001	Tape/Reel	2500 pcs
NSSM103M3T1NHT001	Tape/Reel	2500 pcs

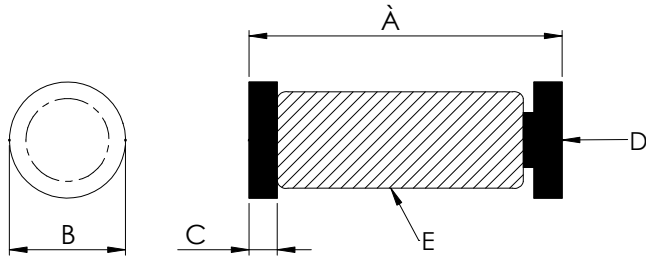
Electrical Specifications

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

Surface Mount Thermistors

NSS Series

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

Disclaimer Notice – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/product-disclaimer.