Vishay Draloric



Metal Film, Cylindrical, Fusible Resistors



FEATURES



- Fusible resistor for constant current designed for overload protection
- · High positive temperature coefficient
- · Flame retardant coating
- · Defined switch-off behaviour
- Pure tin termination on nickel barrier, plated on fress fit steel caps
- Compatible with lead (Pb)-free and lead containing soldering processes
- Lead (Pb)-free and RoHS compliant

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	POWER RATING ¹⁾ P ₇₀ TEMPERATURE COEFFICIENT TOLERANCE RESISTANCE RANGE E-SERIES					
	W	ppm/K	%	Ω		
NMM0207SI	0.35	+ 4500 (± 500)	\pm 5, \pm 10, \pm 20	1R0 - 47R	12 - 24	
NMM0207SI	0.35	+ 4500 (± 500)	± 10, ± 20	R10 - R91	12	

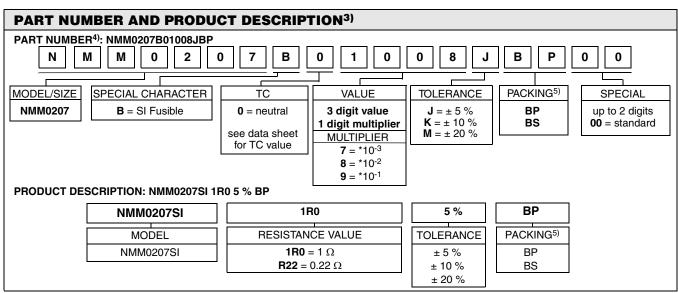
Note

- Permissible dissipation depends on the maximum temperature at the solder point, the component placement density and the substrate material.
- Marking: additional 5th band black; According to IEC 60062; see also datasheet "surface mount resistor marking" (document number: 20020)

TECHNICAL SPECIFICATIONS				
PARAMETER	UNIT	NMM0207SI		
Rated Dissipation at 70 °C	W	0.35		
Minimum Overload to Fuse	W	1.5		
Time to Fuse (max)	S	30		
Max. applicable Voltage after Fusing	V	85		
Thermal Resistance ²⁾	K/W	≤ 220		
Category Temperature Range	°C	- 55 to + 125		
Failure Rate	10 ⁻⁹ /h	< 30		
Weight/1000 pcs	g	71		

Note

2. Based on measurements on test board acc. to EN 140400.



Note

- 3. Products can be ordered using either the PRODUCT DESCRIPTION or the PART NUMBER.
- 4. The PART NUMBER is shown to facilitate the introduction of a unified part numbering system. Currently, this PART NUMBER is applicable in the Americas only.

5. Please refer to table PACKING, see below.

Document Number: 20001 Revision: 15-Feb-06

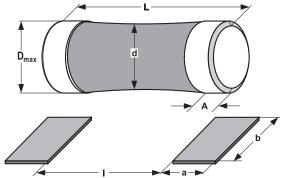




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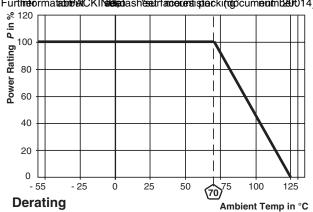
MODEL	DIMENSIONS [in millimeters]				
MODEL	D _{max}	d*	L	A max	A min
NMM0207SI	2.2	D - 0.4	5.8- 0.3	1.2	0.6

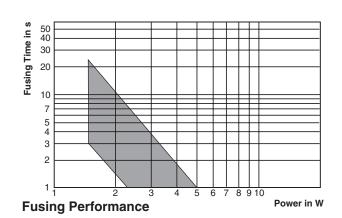
^{*} d measured in the middle of the resistor

	SOLDER PAD DIMENSIONS [in millimeters]					
MODEL	REFLOW SOLDERING			WAVE SOLDERING		
	а	b	I	а	b	ı
NMM0207SI	1.8	2.5	2.9	2.4	2.5	2.8

PACKING					
MODEL	BLISTER TAPE ON REEL ACC. IEC 60286-3				
	DIAMETER	PIECES/REEL	CODE		
NMM0207SI	180 mm/7"	1500	BP		
	330 mm/13"	7500	BS		

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PERFORMANCE					
TEST	CONDITIONS OF TEST	REQUIREMENTS			
Endurance Test at 70 °C IEC 60115-1, 4.25.1	1000 hours at 70 °C, 1.5 hours "ON", 0.5 hours "OFF"	≤ 2 %			
Endurance at UCT IEC 60115-1, 4.25.3	1000 hours at 125 °C without load	≤ 2 %			
Overload Test IEC 60115-1, 4.13	Short time overload for 2 seconds	≤ 2 %			
Thermal Shock IEC 60115-1, 4.19 and IEC 60068-2-14	Rapid change between upper and lower category temperature, 5 cycles	≤ 2 %			
Damp Heat Steady State IEC 60115-1, 4.24 and IEC 60068-2-78	56 days at 40 °C and 93 % relative humidity	≤ 2 %			
Resistance to Soldering Heat IEC 60115-1, 4.18 and IEC 60068-2-58	10 seconds at 260 °C solder bath temperature	≤ 1 %			

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NMM0207SI

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SOLDERING INFORMATION

- For reflow soldering only
- Board has to be thoroughly cleaned after soldering. All flux materials must be completely removed

APPLICABLE SPECIFICATION

• EN 60115-1

For technical questions contact: <u>ff3bresistors@vishay.com</u>

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