

Metal Film Resistors, Fusible Type



FEATURES

- Fusible resistor for constant current designed for overload protection
- High positive temperature coefficient
- Flame retardant coating
- Defined switch-off behaviour

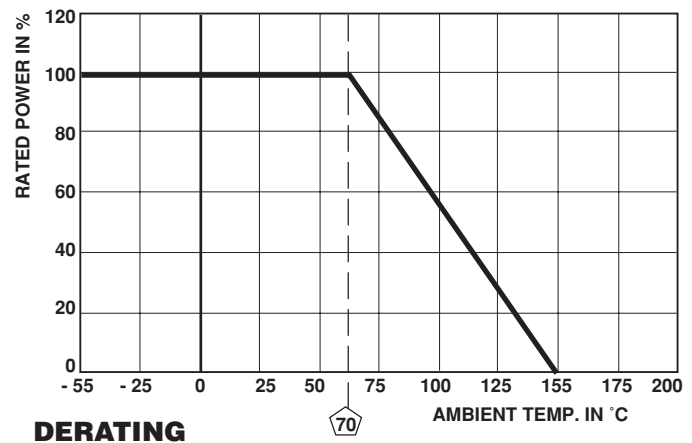
STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{70^{\circ}\text{C}}$ W	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
NMA0207SI	0.35	+ 4500/ \pm 500	5, 10, 20 10, 20	1R0 - 47R R10 - R91	12 - 24 12
NMA0309SI	0.45	+ 4500/ \pm 500	5, 10, 20 10, 20	1R0 - 47R R10 - R91	12 - 24 12
NMA0411SI	0.5	+ 4500/ \pm 500	5, 10, 20 10, 20	1R0 - 47R R10 - R91	12 - 24 12

- Further values on request
- Marking: additional 5th band, black
- Coating: beige

TECHNICAL SPECIFICATIONS

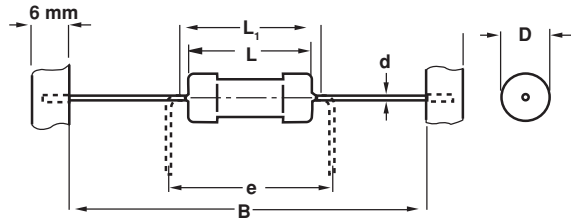
PARAMETER	UNIT	NMA0207SI	NMA0309SI	NMA0411SI
Rated Dissipation at 70°C	W	0.35	0.45	0.5
Minimum Overload to Fuse	W	1.5	2.0	3.0
Time to Fuse (max)	s	30	40	50
Thermal Resistance (max)	K/W	\leq 220	190	150
Max. Applicable Voltage after Fusing	V	85		
Category Temperature Range	°C	- 55 / + 155		
Failure Rate	10 ⁻⁹ /h	< 30		
Weight	g	0.22	0.31	0.52



ORDERING INFORMATION

NMA0207SI	+ 4500 \pm 500	36R	5%	A5
MODEL	TC ppm/K	RESISTANCE RANGE Ω	TOLERANCE \pm %	PACKAGING A5 Ammopack -5000 pcs

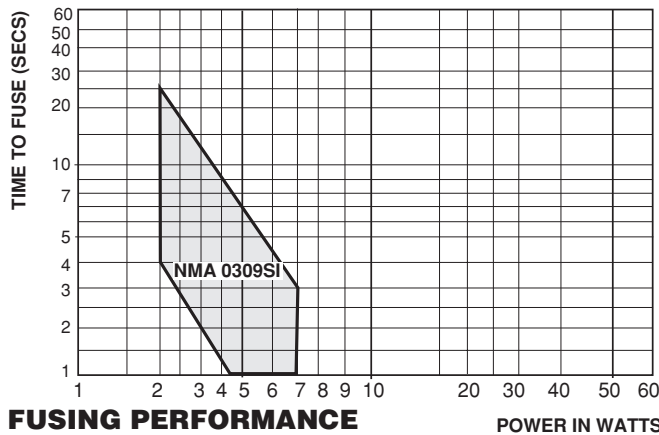
DIMENSIONS



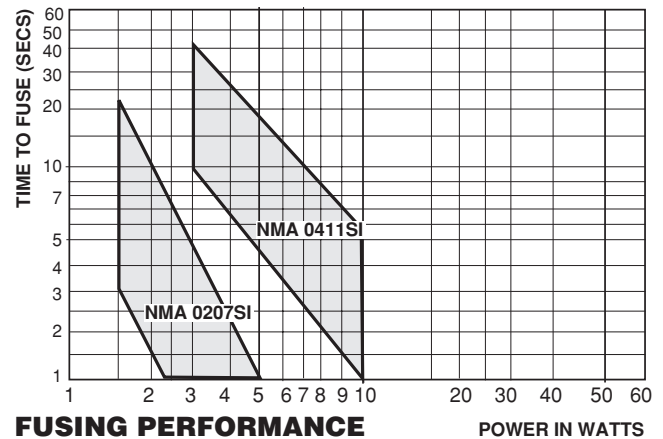
- Taping in acc. with IEC60286-1
- D and L measured in acc. with IEC60294
- d according to IEC60301

MODEL	DIMENSIONS [in millimeters]					
	D	L	L _{1max}	B	d	e
NMA0207SI	2.3 _{-0.3}	6.1 _{-0.5}	8.1	53 ± 1 ¹⁾	0.6	7.5
NMA0309SI	2.9 _{-0.3}	8.1 _{-0.6}	10.1	53 ± 1	0.7	10.0
NMA0411SI	3.5 _{-0.3}	10.5 _{-0.6}	12.5	53 ± 1	0.7	12.5

¹⁾ Also available in 26mm tape



FUSING PERFORMANCE



FUSING PERFORMANCE

PERFORMANCE		
TEST	CONDITIONS OF TEST	REQUIREMENTS
Endurance at 70°C IEC 60115-1 4.25.1	1000 hours at 70°C 1.5 hours "ON", 0.5 hours "OFF"	≤ ± 1%
Endurance at UCT IEC 60115-1 4.25.3	1000 hours at 155°C without load	≤ ± 1%
Thermal Shock IEC 60115-1 4.19, IEC 60068-2-14	Rapid change between upper and lower category temperature	≤ ± 0.25%
Damp Heat Steady State IEC 60115-1 4.24, IEC 60068-2-3	56 days at 40°C and 93% relative humidity	≤ ± 1.5%
Resistance to Soldering Heat IEC 60115-1 4.18, IEC 60068-2-20	10 seconds at 260°C solder bath temperature	≤ ± 0.25%

PACKAGING						
MODEL	REEL			BOX		
	PIECES / REEL	CODE	MIN. ORDER QTY PACKAGING UNITS	PIECES / BOX	CODE	MIN. ORDER QTY PACKAGING UNITS
NMA0207SI	5000	R5	1	5000 2000	A5 A2	1 2
NMA0309SI	5000	R5	1	5000 2000	A5 A2	1 2
NMA0411SI	2500	RE	1	1000	A1	2