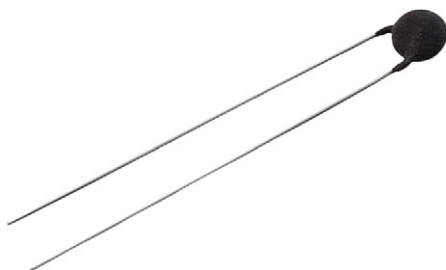


NTC Thermistors, miniAMP Inrush Current Limiters



DESCRIPTION

These miniature inrush current limiters are your solution for space-sensitive applications. The miniAMP series is designed for applications where board space is limited and cool operation is desired. The cost effective miniAMP inrush current limiter is an efficient way to protect components such as relays, diodes, and fuses from inrush current.

FEATURES

- Rugged and reliable
- Can withstand up to 3 A of continuous current and 24 J of input energy
- Operating temperature range: -40 °C to +150 °C
- Radial leaded inrush current limiter is available on kinked or straight leads, the standard lead length is 0.5"
- 24 AWG lead
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS
COMPLIANT

APPLICATIONS

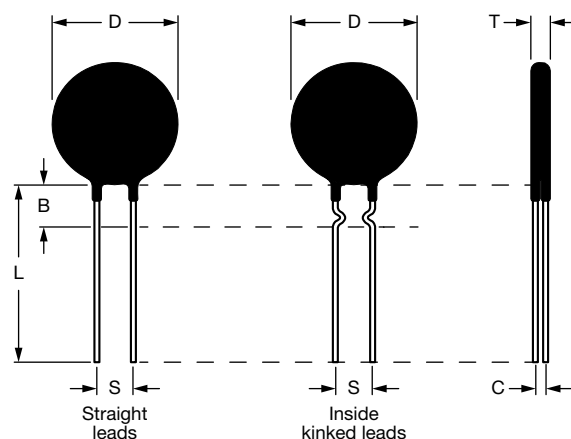
- Switching power supplies
- AC motors
- Uninterruptible power supplies
- Variable frequency drive
- Other equipment that can be improved with inrush current protection

QUICK REFERENCE DATA

PART NUMBER	RESISTANCE AT 25 °C (R_{25}) (Ω)	TOLERANCE ON R_{25} VALUE (%)	MAX. STEADY-STATE CURRENT UP TO 65 °C (A)	MAX. RECOMMENDED ENERGY RATING (J)	MAX. VOLTAGE (V_{AC})	MAX. CAPACITANCE AT 120 V_{AC} (μ F)
SL054R003	4	± 20	3	5	120	340
SL055R001	5	± 25	1	5	120	340
SL0510001	10	± 15	1	6	120	400
SL0510002	10	± 15	2	6	120	400
SL0530001	30	± 20	1	3	120	200
SL0560001	60	± 20	1	1	120	75
SL0512101	120	± 15	1	5	120	340

ELECTRICAL SPECIFICATIONS

PART NUMBER	ACTUAL FAILURE INSTANTANEOUS ENERGY (J)	RESISTANCE AT 100 % MAX. CURRENT (Ω)	RESISTANCE AT 50 % MAX. CURRENT (Ω)	BODY TEMP. AT 100 % MAX. CURRENT (°C)	DISSIPATION FACTOR (mW/°C)	THERMAL TIME CONSTANT (s)	MATERIAL TYPE (FOR BETA AND CURVE)
SL054R003	-	-	-	138	5	10	A
SL055R001	-	-	-	-	5	10	A
SL0510001	12	0.4	0.8	149	6.5	9	B
SL0510002	12	0.4	0.8	149	6.5	9	B
SL0530001	6	1	1.5	112	4	20	G
SL0560001	2	1	1.7	144	7	9	H
SL0512101	24	12	24	121	5.8	9	M

MECHANICAL SPECIFICATIONS in millimeters


PART NUMBER	B	C	D	L	S	T	LEAD DIAMETER	LEAD STYLE
SL054R003	4.5 nom.	1.8 nom.	6.0 max.	38.0 nom.	5.1 ± 0.3	3.5 max.	0.5 nom.	Straight
SL054R003A								Inside kinked
SL055R001	4.5 nom.	1.8 nom.	6.0 max.	38.0 nom.	5.1 ± 0.3	3.5 max.	0.5 nom.	Straight
SL055R001A								Inside kinked
SL0510001	2.5 max.	1.9 ± 0.7	5.0 ± 0.5	38.0 nom.	5.1 ± 0.3	2.5 ± 0.5	0.5 nom.	Straight
SL0510001A								Inside kinked
SL0510002	2.5 max.	1.9 ± 0.7	5.0 ± 0.5	38.0 nom.	5.1 ± 0.3	2.5 ± 0.5	0.5 nom.	Straight
SL0510002A								Inside kinked
SL0530001	4.5 nom.	1.8 nom.	6.0 max.	38.0 nom.	5.1 ± 0.3	2.7 max.	0.5 nom.	Straight
SL0530001A								Inside kinked
SL0560001	2.5 max.	2.22 ± 0.5	5.5 ± 0.5	38.0 nom.	5.1 ± 0.3	2.8 nom.	0.5 nom.	Straight
SL0560001A								Inside kinked
SL0512101	2.5 max.	2.22 ± 0.5	5.0 ± 0.5	38.0 nom.	5.1 ± 0.3	2.7 ± 0.4	0.5 nom.	Straight
SL0512101A								Inside kinked



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