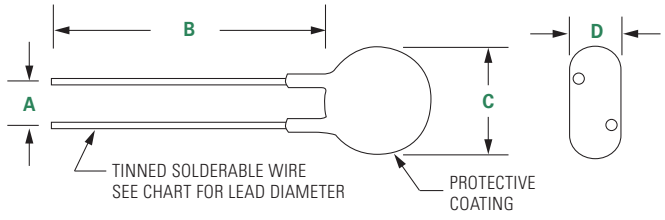
ST Series Inrush Current Limiters



Description

Littelfuse inrush current limiters (power thermistors) are specially formulated and processed NTC thermistors suitable for suppressing high inrush currents in switching power supplies and other applications where the high initial starting currents are undesirable. Their unique design enables them to handle extremely high current and voltage levels. In a typical power supply application, the inrush current limiting power thermistor is used in series with the filter capacitors. Upon application of the initial voltage, the device, due to its relatively high resistance, limits the current flow to an acceptable level until the capacitors are charged. Thereafter, the device decreases in resistance substantially to a level where the voltage drop across it is negligible.

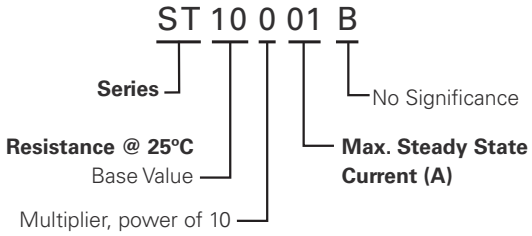
Dimensions



Dimensions shown in inches.

A	B	C	D
0.310" Max	0.700" Min	See Dim "D"	See Dim "T"

Part Numbering System



Note: Not all combinations of Part Number codes are available. Contact Littelfuse for details.

© 2018 Littelfuse, Inc. Revised: February 26, 2018
Specifications are subject to change without notice.

ST Series Inrush Current Limiters

Specifications

Part Number	Resistance Ohms @25°C	*Resistance Tol. ± % @ 25°C	Imax Max. Steady State Current I_{MAX} (A)	Nominal Resistance @ Max. Current, RImax (Ohms)	RImax Resis. @ Max. Current Ohms	Lead Diameter Nominal (Inch)
ST0R713B	0.7	25	13	0.025	0.025	0.04
ST1R005B	1	30	5	0.040	0.09	0.024
ST1R020B	1	15	20	0.030	0.015	0.04
ST1R030B	1	25	30	0.050	0.015	0.04
ST1R508B	1.5	20	8	0.040	0.6	0.032
ST2R018B	2	20	18	0.135	0.03	0.04
ST2R503B	2.5	20	3	0.070	0.15	0.032
ST2R507B	2.5	20	7	0.070	0.05	0.032
ST2R509B	2.5	20	9	0.060	0.04	0.032
ST2R510B	2.5	20	10	0.200	0.04	0.04
ST10001B	10	20	1	0.090	0.65	0.024
ST10003B	10	20	3	0.015	0.2	0.032
ST10005B	10	20	5	0.015	0.2	0.04
ST10006B	10	20	6	0.600	0.15	0.04
ST10010B	10	20	10	0.030	0.1	0.04
ST12001B	12	20	1	0.150	1.19	0.032
ST15004C	15	20	4	0.050	0.25	0.032
ST16002D	16	20	2	0.040	0.47	0.032
ST20001C	20	20	0.3	0.110	1	0.024
ST20002B	20	20	1.75	0.400	0.6	0.032
ST25002C	25	20	2	0.100	0.64	0.032
ST20100B	200	20	0.1	0.170	6.3	0.018

*Resistance tolerances of ± 1%, 2%, and 5% are available upon request

© 2018 Littelfuse, Inc. Revised: February 26, 2018
Specifications are subject to change without notice.

ST Series Inrush Current Limiters

Specifications

Part Number	Resistance Ohms @25°C	*Resistance Tol. ± % @ 25°C	Imax Max. Steady State Current I_{MAX} (A)	Nominal Resistance @ Max. Current, RImax (Ohms)	RImax Resis. @ Max. Current Ohms	Temperature Coefficient (% / °C) @ 25°C	Lead Diameter Nominal (Inch)	Temperature Rating (°C)
ST2R515B	0.7	25	13	0.500	0.025	_	0.04	_
ST4R005B	1	30	5	0.250	0.09	_	0.024	_
ST5R002B	1	15	20	0.470	0.015	_	0.04	_
ST5R004B	1	25	30	1.000	0.015	_	0.04	_
ST5R005B	1.5	20	8	0.600	0.6	_	0.032	_
ST7R004B	2	20	18	1.075	0.03	_	0.04	_
ST8R001B	2.5	20	3	0.740	0.15	_	0.032	_
ST8R003B	2.5	20	7	1.485	0.05	_	0.032	_
ST8R006B	2.5	20	9	_	0.04	-4.4	0.032	+300 (Max)
ST30002B	10	20	1	0.280	0.65	_	0.024	_
ST30003B	10	20	3	0.135	0.2	_	0.032	_
ST33001B	10	20	5	0.650	0.2	_	0.04	_
ST33001C	10	20	6	0.200	0.15	_	0.04	_
ST33001D	10	20	10	0.200	0.1	_	0.04	_
ST3R008B	12	20	1	0.150	1.19	_	0.032	_
ST3R017B	15	20	4	0.100	0.25	_	0.032	_
ST40002B	16	20	2	1.190	0.47	_	0.032	_
ST5R006B	20	20	0.3	6.300	1	_	0.024	_
ST5R007B	20	20	1.75	0.640	0.6	_	0.032	_
ST5R014B	25	20	2	0.460	0.64	_	0.032	_
ST5R008B	200	20	0.1	0.700	6.3	_	0.018	_

* Resistance tolerances of ± 1%, 2%, and 5% are available upon request

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/disclaimer-electronics