

Inrush Current Limiters

Inrush current limiters limit the large initial current present when a circuit is first energized. The relatively high initial resistance of the thermistor acts to limit the inrush current. These parts are used in switching power supplies to protect components when the power supply is turned on and the capacitors draw a large amount of current. Once the the NTC Inrush Current Limiter is heated to a high temperature, its resistance declines to a very low level and is effectively removed from the circuit.

TYPICAL APPLICATION:

- Switching Power Supplies
- Terminology

I_{max} - Maximum steady state current (DC or AC).

R @ I_{max} - Approximate resistance at maximum steady state current.

NTC Inrush Current Limiter Products

MEGA - Amp SERIES

Part Number	$\Omega @ 25\text{ }^{\circ}\text{C}$ +/-20%	I _{max}	R@I _{max} (Ω)	Maximum Diameter (Inches)	Lead Diameter (Inches)
WS1520	0.50	36.0	0.009	1.30	0.040
WS1530	0.50	30.0	0.012	1.30	0.040
WS1540	1.00	36.0	0.011	1.30	0.040
WS1550	1.00	30.0	0.014	1.30	0.040
WS1560	2.00	23.0	0.022	1.30	0.040
WS1570	2.00	25.0	0.016	1.30	0.040
WS1580	5.00	20.0	0.035	1.30	0.040
WS1590	10.00	15.0	0.048	1.30	0.040

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Part Number	$\Omega @ 25\text{ }^{\circ}\text{C}$ +/-20%	I _{max}	R@I _{max} (Ω)	Maximum Diameter (Inches)	Lead Diameter (Inches)
WS320	1.00	20.00	0.015	0.90	0.040
WS330	2.00	18.00	0.030	0.90	0.040
WS340	2.50	3.00	0.150	0.60	0.032
WS350	2.50	7.00	0.050	0.60	0.032
WS360	2.50	9.00	0.040	0.60	0.032
WS370	2.50	10.00	0.040	0.90	0.040
WS380	2.50	15.00	0.030	0.90	0.040
WS390	4.00	5.00	0.150	0.50	0.032
WS400	4.00	8.00	0.070	0.60	0.040
WS410	4.00	14.00	0.050	0.90	0.040
WS420	5.00	2.00	0.400	0.60	0.032
WS430	5.00	4.00	0.150	0.60	0.032
WS440	5.00	7.00	0.070	0.60	0.032
WS450	5.00	8.00	0.050	0.70	0.040
WS460	5.00	9.00	0.060	0.90	0.040
WS470	5.00	10.00	0.060	0.90	0.040
WS480	5.00	12.00	0.060	0.90	0.040
WS490	7.00	3.00	0.140	0.50	0.032
WS500	7.00	4.00	0.150	0.60	0.040
WS510	7.00	5.00	0.150	0.60	0.040
WS520	7.00	6.00	0.150	0.60	0.040
WS530	10.00	1.50	0.250	0.45	0.032
WS540	10.00	2.00	0.200	0.45	0.032
WS550	10.00	3.00	0.200	0.50	0.032
WS560	10.00	5.00	0.200	0.50	0.032
WS570	10.00	6.00	0.150	0.60	0.040
WS580	12.00	4.00	0.220	0.50	0.040
WS600	20.00	1.75	0.600	0.50	0.032
WS610	20.00	2.50	0.500	0.50	0.032
WS620	25.00	1.50	0.600	0.50	0.032
WS630	40.00	2.00	0.600	0.65	0.032
WS650	120.00	3.00	0.900	0.95	0.040