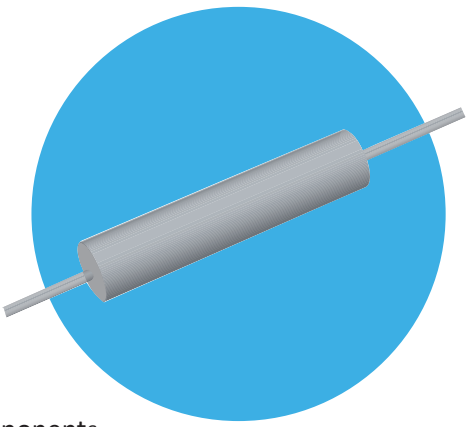
Dual Function Fuse Resistors



F500 Series

- Affords protection for semiconductor devices
- Acts as a precision wirewound resistor and a fuse
- Allows precise control of fusing point and time lag
- Reduces the number of discrete components required
- Eliminates unnecessary blowing due to transient conditions
- Eliminates fire hazard and circuit board damage due to overheated components

Electrical Data

IRC Style	Resistance (ohms)	Steady State		Blow Condition I			Blow Condition II		
		Current	Dissipation (watts)	Current	Dissipation (watts)	Blow Time (T max)	Current	Dissipation (watts)	Blow Time (T max)
F501	0.2	2.2A	1	10A	20	500ms	25A	125	50ms
F502	0.2	2.2A	1	10A	20	300ms	25A	125	30ms
F503	0.5	1.4A	1	6A	18	10sec	15A	112	100ms
F504	0.5	1.4A	1	6A	18	500ms	15A	112	50ms
F505	0.5	1.4A	1	6A	18	50ms	15A	112	10ms
F506	1	1.0A	1	4A	16	10sec	10A	100	100ms
F507	1	1.0A	1	4A	16	500ms	10A	100	50ms
F508	1	1.0A	1	4A	16	50ms	10A	100	10ms
F509*	2	700ma	1	3A	18	10sec	7A	98	50ms
F510*	2	700ma	1	3A	18	200ms	7A	98	50ms
F511*	2	700ma	1	3A	18	50ms	7A	98	10ms
F512*	5	450ma	1	2A	20	200ms	4.5A	101	50ms
F513*	5	400ma	0.8	1.5A	10	50ms	4.0A	80	10ms
F514*	5	350ma	0.6	1.0A	5	100ms	1.4A	10	20ms
F515*	10	300ma	0.9	1.2A	14	200ms	3.0A	90	10ms
F516*	10	300ma	0.9	1.0A	10	100ms	1.3A	17	50ms
F517*	10	200ma	0.4	600ma	3.6	100ms	900ma	8	50ms
F518*	20	220ma	1	600ma	7.2	10sec	900ma	16	100ms
F519*	20	220ma	1	600ma	7.2	100ms	900ma	16	50ms
F520*	20	150ma	0.4	350ma	2.4	500ms	450ma	4	50ms
F521*	50	140ma	1	400ma	8.0	500ms	600ma	18	50ms
F522*	50	130ma	0.8	350ma	6.1	100ms	450ma	10	50ms
F523*	50	80ma	0.3	200ma	2.0	200ms	240ma	2.9	50ms
F524*	100	100ma	1	250ma	6.2	10sec	300ma	9.0	100ms
F525*	100	80ma	0.6	200ma	4.0	200ms	250ma	6.2	50ms
F526*	100	60ma	0.4	140ma	2.6	10sec	180ma	3.2	200ms
F527*	200	70ma	1	200ma	8.0	10sec	250ma	12.5	100ms
F528*	200	60ma	0.8	150ma	4.0	100ms	250ma	12.5	10ms

*UL LISTED - Add "S" To Style Description

Contact factory for specification limits beyond these listed.

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

BI Technologies IRC Welwyn

http://www.ttelectronics.com/resistors

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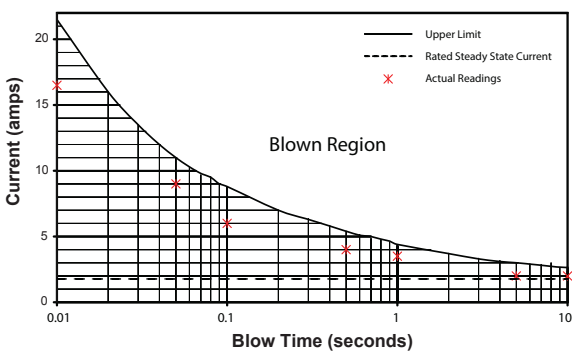
Capability Data

Resistance Range	0.2Ω to 200Ω
Resistance Tolerance	10% STD, 5% and 2%
Operating Temperature	-55°C to +150°C
TCR	±150ppm <1Ω, ±50ppm, 1Ω and above
Construction	Intrinsically safe single fusing element - all welded construction - ceramic bobbin - ceramic shell, air encapsulated. Flameproof construction Various quality assurance data options available, including conditioning and plot of blow time vs. current.

Blow Time vs Current Graph

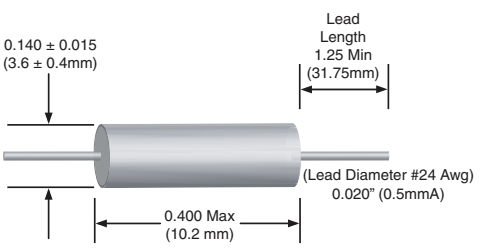


All F 500 Style Fuse Resistors have been tested and rated for Current v/s Maximum Blow Time for blow times between 10 msec and 10 sec. A general illustration is shown. Actual blow time v/s current data may be obtained with each lot shipment upon request when ordering.

Ordering Data

Contact factory for ordering information.

Physical Data



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