

392 Series, TE5 Time-Lag Fuse








Description

The 392 Series is a TE5 Fuse. It is a time-lag fuse designed in accordance to IEC 60127-3, Standard Sheet 4.

Features

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free, Lead-free and RoHS compliant
- Red Phosphorus Free
- Conforms to EN/IEC/J/K 60127-1 and EN/IEC/J/K 60127-3
- Conforms to GB/T 9364.1 and GB/T 9364.3
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14

Agency Approvals

Agency	Agency File Number	Ampere Range
	126983	0.28A - 6.3A*
	E67006	0.28A - 6.3A
	JET1896-31007-2002	1A - 5A
	2019010207182336	0.8A - 6.3A
	SU05024 - 7013A	0.8A
	SU05024 - 7014B	1A - 2.5A
	SU05024 - 7015B	3.15A
	SU05024 - 7016B	4A
	SU05024 - 7017B	5A
	SU05024 - 7018B	6.3A

*Red Phosphorus Free from 0.28A to 5A.

Applications

- Battery Chargers
- Consumer Electronics
- Power supplies
- Industrial Controllers
- Chargers

Electrical Characteristics for Series

% of Ampere Rating	Opening Time
150%	1 Hour, Min.
210%	120 s, Max.
275%	400 ms Min. ; 10 Sec. Max.
400%	150 ms Min. ; 3 Sec. Max.
1000%	20 ms Min. ; 150 ms Max.

Additional Information



Datasheet








Resources



Samples

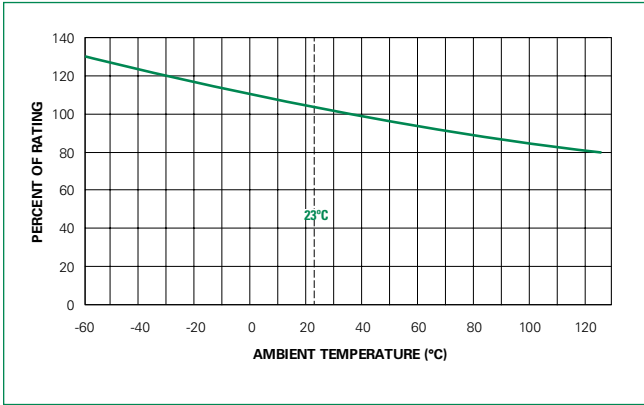
Electrical Characteristic Specifications by Item

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms) ¹	Voltage Drop 1.0xI _N max. (mV)	Power Dissipation 1.5xI _N max. (mW)	Melting Integral 10xI _N max. (A ² s)	Agency Approvals				
												
280 mA	280	250V	35A@250Vac ¹ 130A@250Vac ²	0.33	115	168	0.048	x	x	-	-	-
500 mA	500	250V		0.163	105	125	2.175	x	x	-	x	x
800 mA	800	250V		0.096	110	280	5.12	x	x	-	x	x
1.0 A	1100	250V		0.0715	115	400	8.0	x	x	x	x	x
1.25 A	1125	250V		0.0569	100	500	11.95	x	x	x	x	x
1.6 A	1160	250V		0.04	95	600	18.43	x	x	x	x	x
2.0 A	1200	250V		0.0298	90	700	29.0	x	x	x	x	x
2.5 A	1250	250V		0.024	85	750	47.81	x	x	x	x	x
3.15 A	1315	250V		0.017	80	1100	78.39	x	x	x	x	x
4.0 A	1400	250V	40A@250Vac ¹ 50A@250Vac ²	0.0128	75	1200	126.4	x	x	x	x	x
5.0 A	1500	250V	50A@250Vac ^{1,2}	0.0101	70	1000	106.25	x	x	x	x	x
6.3 A	1630	250V	63A@250Vac ^{1,2}	0.0077	65	1200	160.74	x	x	-	x	x

Notes:

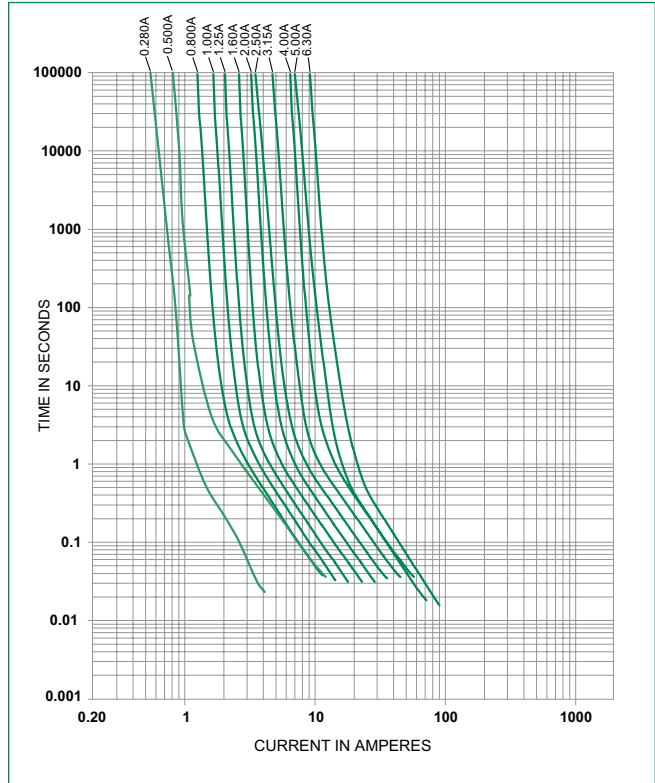
- 1) Resistance is measured at 10% of rated current, 25°C.
- 2) Per EN/IEC/J/K 60127-1 and EN/IEC/J/K 60127-3
- 3) Per UL 248-1 and UL 284-14

Temperature Re-rating Curve

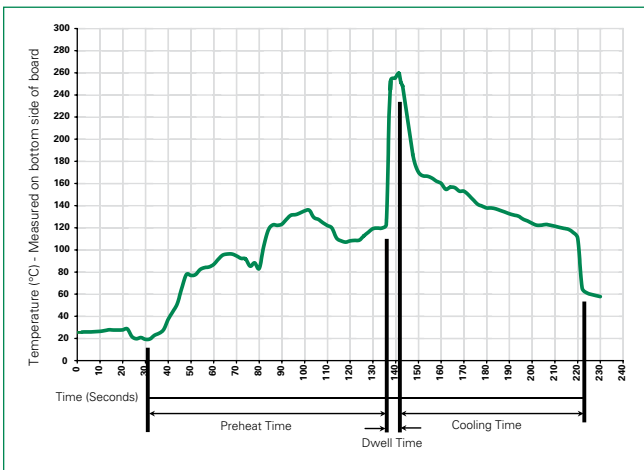


Note:
1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260°C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C +/- 5°C
Heating Time: 5 seconds max.

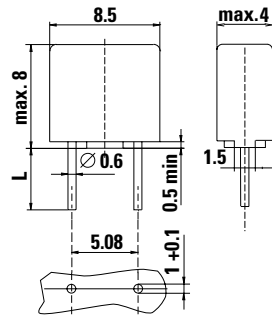
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

Materials	Base/Cap: Thermoplastic Polyamide PA 6.6, UL 94 V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10 N (IEC 60068-2-21)
Solderability	260°C, ≤ 3 sec. (Wave) 350°C, ≤ 3 sec. (Soldering iron)
Soldering Heat Resistance	260°C, 10 sec. (IEC 60068-2-20) 350°C, ≤ 3 sec. (Soldering iron)

Operating Temperature	-40°C to +125°C (Consider re-rating)
Climatic Category	-40°C to +85°C/21 days (IEC 60068-1, -2-1, -2-2, -2-78)
Stock Condition	+10°C to +60°C Relative humidity ≤ 75% yearly average, without dew, maximum value for 30 days - 95%
Vibration Resistance	24 cycles at 15 min. each (IEC 60068-2-6) 10 – 60Hz at 0.75mm amplitude 60 – 2000Hz at 10g acceleration

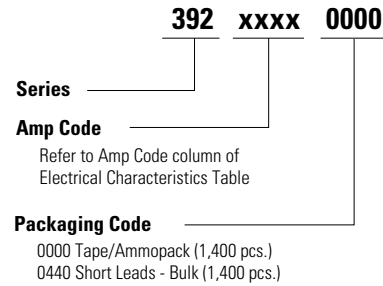
Dimensions



Holes in the printed circuit board

Long Leads (L=18.8mm)
Short Leads (L=4.3mm)

Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Tape and Ammopack	N/A	1,400	0000	N/A
Short Leads	N/A	1,400	0440	N/A