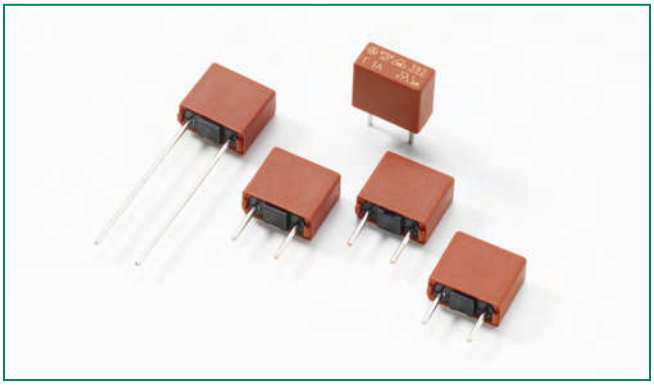
392 Series, TE5 Time-Lag Fuse



Agency Approvals

Agency	Agency File Number	Ampere Range
VDE	126983	0.28A - 6.3A
	1410866 1026673	0.8A - 4A 5A - 6.3A
c UL us	E67006	0.28A - 6.3A
PS E	JET1896-31007-2002	1A - 5A
CQC	CQC07012021162	0.8A - 6.3A
	SU05024 - 7013A SU05024 - 7014A SU05024 - 7015A SU05024 - 7016A SU05024 - 7017A SU05024 - 7018A	0.8A - 6.3A

Description

TE5 Fuse, Time-Lag type, 250V rated, designed in accordance to IEC 60127-3.

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

Applications

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

Additional Information

Datasheet | **Resources** | **Samples**

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.**

Electrical Characteristic Specifications by Item

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Voltage Drop 1.0×I_N max. (mV)	Power Dissipation 1.5×I_N max. (mW)	Melting Integral 10×I_N max. (A^2s)	Agency Approvals					
								VDE		c UL us	PS E	CQC	
280 mA	0280	250V	35A@250VAC	0.3300	115	168	0.048	x		x			
800 mA	0800	250V	25A@250VAC	0.0960	110	280	5.120	x	x	x		x	x
1.00 A	1100	250V		0.0715	115	400	8.00	x	x	x	x	x	x
1.25 A	1125	250V		0.0569	100	500	11.95	x	x	x	x	x	x
1.60 A	1160	250V		0.0400	95	600	18.43	x	x	x	x	x	x
2.00 A	1200	250V		0.0298	90	700	29.00	x	x	x	x	x	x
2.50 A	1250	250V		0.0240	85	750	47.81	x	x	x	x	x	x
3.15 A	1315	250V	32A@250VAC	0.0170	80	1100	78.39	x	x	x	x	x	x
4.00 A	1400	250V	40A@250VAC	0.0128	75	1200	126.40	x	x	x	x	x	x
5.00 A	1500	250V	50A@250VAC	0.0101	70	1000	106.25	x	x	x	x	x	x
6.30 A	1630	250V	63A@250VAC	0.0077	65	1200	160.74	x	x	x		x	x

Notes:
1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.
2) Resistance is measured at 10% of rated current, 25°C.

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Application testing is strongly recommended. Specifications are subject to change without notice.
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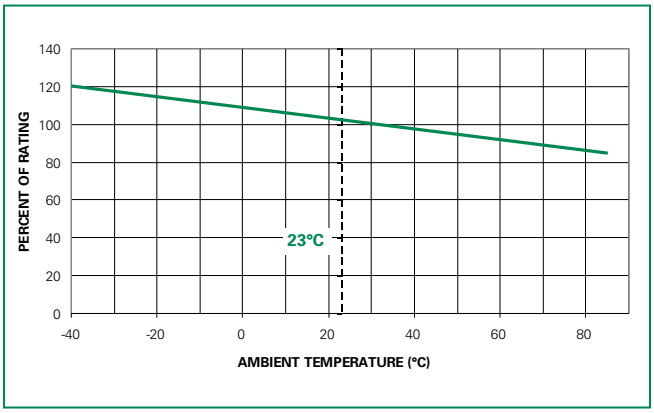
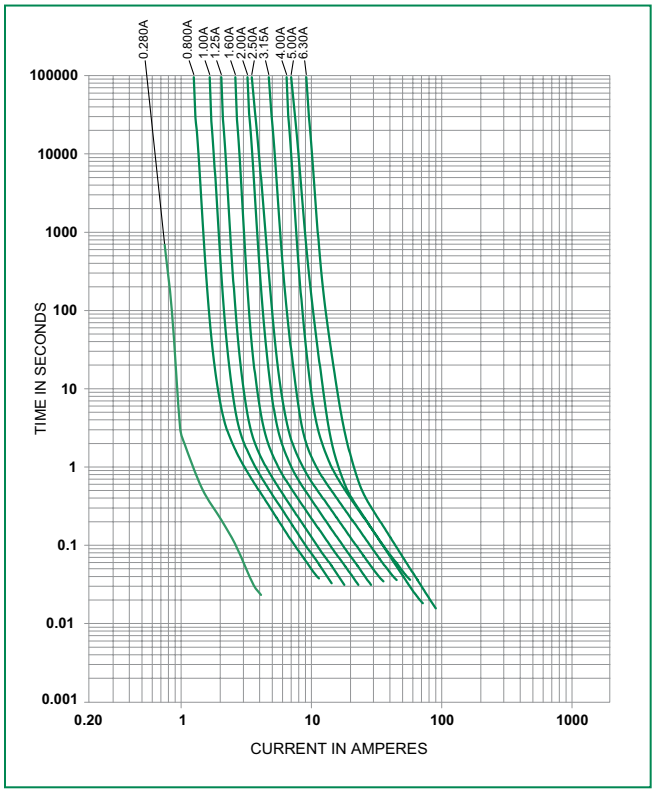
Temperature Re-rating Curve

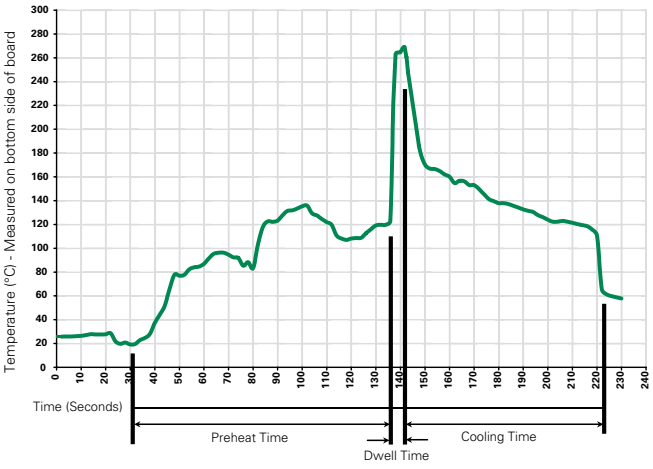


Note:
1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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.

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Radial Lead Fuses

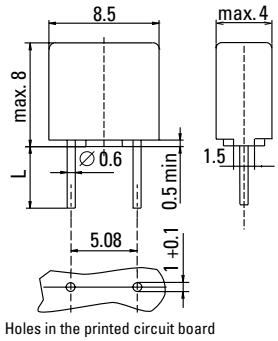
TE5 > Time-Lag Fuse > 392 Series

Product Characteristics

Materials	Base/Cap: Brown 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 +85°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



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

Part Numbering System

392 xxxx 0000

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0000 Tape/Ammopack (1,400 pcs.)
0440 Short Leads - Bulk (1,400 pcs.)

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

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