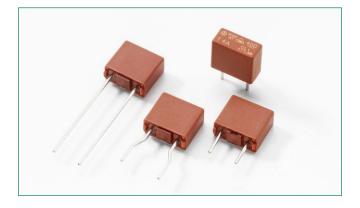


# 400 Series, TE5® Fuse, Time-Lag



#### **Agency Approvals**

Agency	Agency File Number	Ampere Range		
c <b>FN</b> us	E67006	0.50A – 6.3A		
PS	JET1896-31007-2001 JET1896-31007-1006	1A – 5A 6.3A		
VDE	40026355	0.50A – 6.3A		
(€	N/A	0.5A - 6.3A		
Ŵ	2020970207000059	0.50A - 6.3A		
<u>I</u>	SU05024-9004 SU05024-9003 SU05024-9001 SU05024-10003 SU05024-9002	0.50A – 0.80A 1A – 2.5A 3.15A 4A – 5A 6.3A		

# Additional Information







# Description

The 400 Series TE5<sup>®</sup> Fuse is a Time-Lag type subminiature fuse that is designed for overcurrent protection. It is rated 250V and meets the requirements of IEC 60127-3.

#### Features

- Halogen free, Lead-free and RoHS compliant
- Reduced PCB space requirements
- Direct solderable or plugin versions
- Low internal resistance
- Shock safe casing
- Vibration resistant

- High Breaking Capacity up to 130A at 250VAC
- Internationally approved
- Recognized to UL/CSA/ NMX 248-1 and UL/CSA/ NMX 248-14
- Conforms to IEC/EN/J/K 60127-1 and EC/EN/J/K 60127-3

# Applications

- Battery chargers
- Consumer electronics
- Power supplies
- Industrial controllers

# **Electrical Characteristics**

% of Ampere Rating	Opening Time
150%	1 Hour, Minimum
210%	120 Secs., Maximum
275%	400 ms, Minimum; 10 Secs., Maximum
400%	150 ms, Minimum; 3 Secs., Maximum
1000%	20 ms, Minimum; 150 ms, Maximum

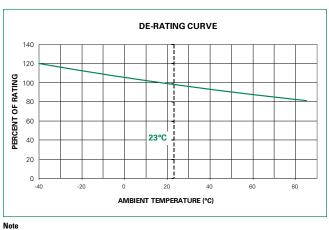
# **Electrical Characteristics**

		D ( )			Voltage	Power	Melting	Ag		Agency Approvals			
Amp Code	Rated Current	Rated Voltage (V)	Breaking Capacity	Nominal Cold Resistance (Ohms)	Drop 1.0×I <sub>N</sub> max. (mV)	Dissipation 1.0×I <sub>N</sub> max. (mW)	Integral 10×I <sub>N</sub> max. (A²s)	c <b>FL</b> ° us	PS E		۲	K	Œ
0.5	0.5A	250		0.1950	165	297	2.170	x	-	х	х	х	х
0800	0.8A	250		0.1003	116	387	6.720	x	-	х	х	х	x
1100	1.00A	250		0.0808	89	432	10.70	x	х	х	х	х	x
1125	1.25A	250		0.0562	76	411	14.44	x	х	x	х	х	x
1160	1.60A	250	1001	0.0384	76	601	21.75	x	х	х	х	х	x
1200	2.00A	250	130A @250VAC	0.0292	75	758	46.00	x	х	х	х	х	x
1250	2.50A	250	@200VAC	0.0216	61	683	61.94	x	х	х	х	х	x
1315	3.15A	250		0.0167	55	921	101.61	x	х	x	х	х	x
1400	4.00A	250		0.0124	65	936	133.40	x	х	х	х	х	x
1500	5.00A	250		0.0098	56	948	216.50	x	х	х	х	х	x
1630	6.30A	250		0.0072	48	926	323.08	x	х	х	х	х	х

\* Per VDE, approved breaking capacity is at 100A, 250VAC

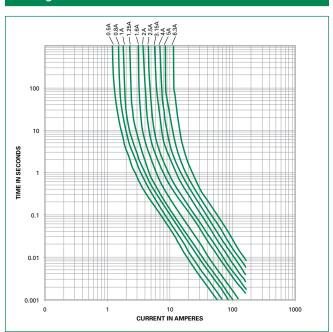


# Temperature Re-rating Curve

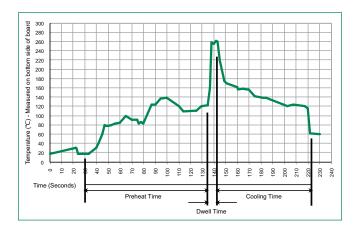


1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## **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.



**Part Numbering System** 

Series

Amp Code

0440

Packaging Code

Refer to Amp Code column of

0000 Tape/Ammopack

**Electrical Characteristics Table** 

Shortleads - Bulk 0075 7.5mm pitch - Bulk

Drodu	ict Cha	rantar	otion
FIUUU	ici Gila	auter	ISLICS

Materials	Base/Cap: Brown Thermoplastic Polyamide, UL 94 V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10 N (IEC 60068-2-21)
Solderability	260°C, $\leq$ 3s. (Wave) 350°C, $\leq$ 1s. (Soldering Iron)
Soldering Heat Resistance	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)

<b>Operating Temperature</b>	-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 Conditions	+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 60028-2-6) 10–60Hz at 0.75mm amplitude 20–2000Hz at 10g acceleration

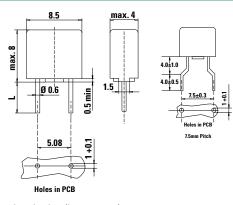
400 xxxx 0000

(1,400 pcs)

(1,400 pcs)

(1,400 pcs)

## Dimensions



Long Leads (L=18.8±0.3mm) Short Leads (L=4.3±0.3mm)

# Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width			
400 Series							
Tape & Ammopack	N/A	1,400	0000	N/A			
Short Leads	N/A	1,400	0440	N/A			
7.5 mm Pitch	N/A	1,400	0075	N/A			

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