TE5<sup>®</sup> > Time-Lag Fuse > 396 Series

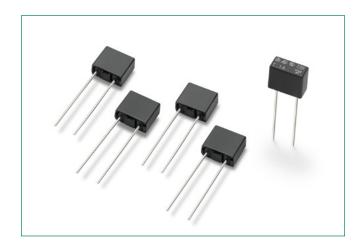
# 396 Series, TE5® Time-Lag Fuse











### **Description**

The 396 Series TE5® fuses are time-lag type, 125V rated, and are designed in accordance to UL 248-14.

#### **Features**

- RoHS-compliant, Leadfree and Halogen-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Low internal resistance
- · Shock safe casing
- Vibration resistant
- Available from 0.05A to 6.3A

#### **Agency Approvals**

Agency	Agency File Number	Ampere Range
c (ÎL)	E67006	0.05A - 6.3A
PS	JET1896-31007-1005	1A - 5A

### **Applications**

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

#### **Additional Information**







Samples

#### **Electrical Characteristics**

% of Ampere Rating	Opening Time	
200%	60 Seconds, Max.	

### **Electrical Characteristics**

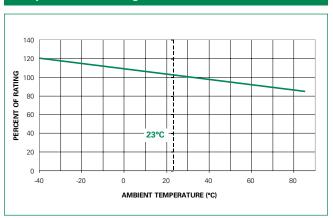
Rated		Voltage	Breaking	Nominal Cold	Voltage Drop	Power Dissipation	Melting Integral	Agency Approvals	
Amp Code	Current	Rating	Capacity	Resistance (Ohms)	1.0×I <sub>N</sub> max. (mV)	1.0×I <sub>N</sub> max. (mW)	10×l <sub>N</sub> max. (A²s)	'Ñ	PS
0050	50mA	125V		12.5000	900	45	0.011	Х	-
0063	63mA	125V		8.7900	800	50	0.017	X	-
0800	80mA	125V		6.0090	700	55	0.02	Х	-
0100	100mA	125V		3.8400	600	60	0.04	X	-
0125	125mA	125V		2.9000	550	70	0.05	X	-
0160	160mA	125V		1.7700	480	80	0.09	Х	-
0200	200mA	125V		1.2000	390	80	0.14	X	-
0250	250mA	125V		0.7500	350	90	0.26	X	-
0315	315mA	125V		0.5450	300	95	0.32	Х	-
0400	400mA	125V		0.3750	250	100	0.58	X	-
0500	500mA	125V	100A@125	0.2470	220	110	0.86	X	-
0630	630mA	125V	VAC	0.1850	210	135	1.15	X	-
0800	800mA	125V		0.1250	160	130	1.92	X	-
1100	1.00A	125V		0.0868	155	155	3.25	X	×
1125	1.25A	125V		0.0666	145	185	4.69	X	X
1160	1.60A	125V		0.0502	130	210	6.76	X	X
1200	2.00A	125V		0.0398	125	250	11.90	Х	Х
1250	2.50A	125V		0.0297	120	300	17.81	Х	X
1315	3.15A	125V		0.0216	110	350	26.29	X	X
1400	4.00A	125V		0.0164	110	400	38.40	X	X
1500	5.00A	125V		0.0112	95	475	71.25	Х	X
1630	6.30A	125V		0.0087	95	570	144.87	X	-

- 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.

# **Radial Lead Fuses**

TE5® > Time-Lag Fuse > 396 Series

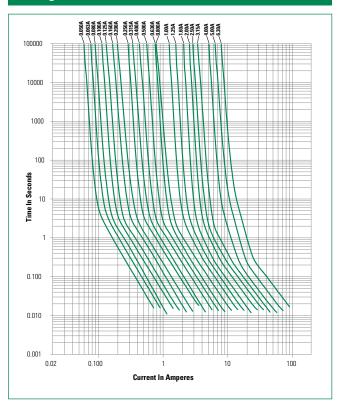
### **Temperature Re-rating Curve**



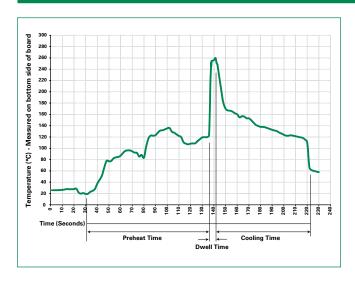
#### Note:

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.

## **Radial Lead Fuses**

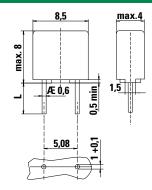
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#### **Product Characteristics**

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, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)		
Soldering Heat Resistance	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)		

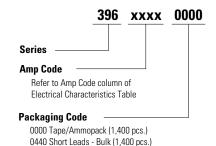
Operating Temperature	-40°C to +125°C (Consider re-rating)	
Climatic Category	-40°C to +85°C/21 days (IEC 60068-1,-2-1,-2-2,-2-78)	
Stock Conditions	+10°C to +60°C RH ≤ 75% yearly average, without dew, maximum value for 30 days-95%	
Vibration Resistance	24 cycles at 15 min. each (IEC 60068-2-6) 10 -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

#### **Dimensions**



Holes in PCB Long Leads (L=18.8mm) Short Leads (L=4.3mm)

#### **Part Numbering System**



#### **Packaging**

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

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