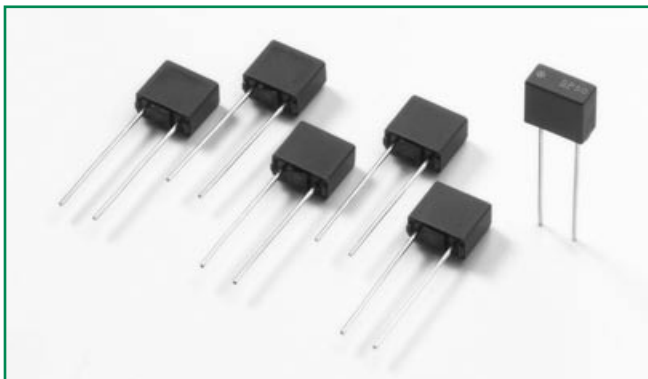


RoHS **391 Series, TE5®, Fast-Acting Fuse**



Description

The 391 Series are TR5® short circuit protector, fast-acting type, 65V rated fuses. For Short Circuit Protection of Sensitive Electronic Components and Assemblies.

Features

- For worldwide applications
- Reduced PCB space requirements
- Highly defined cut-off times
- Irreversible physical separation
- Low internal resistance
- Flame resistant encapsulated casing
- RoHS compliant and Lead-free
- Available from 125mA to 4A.

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
	E67006	125mA - 4A

Electrical Characteristics

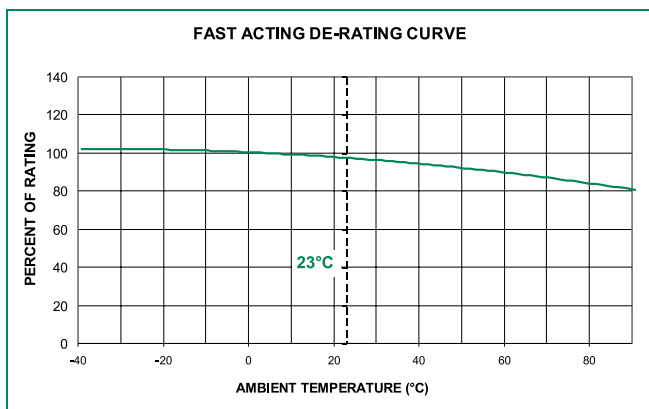
% of Ampere Rating	Opening Time
300	2 Seconds, Max.

Electrical Characteristics

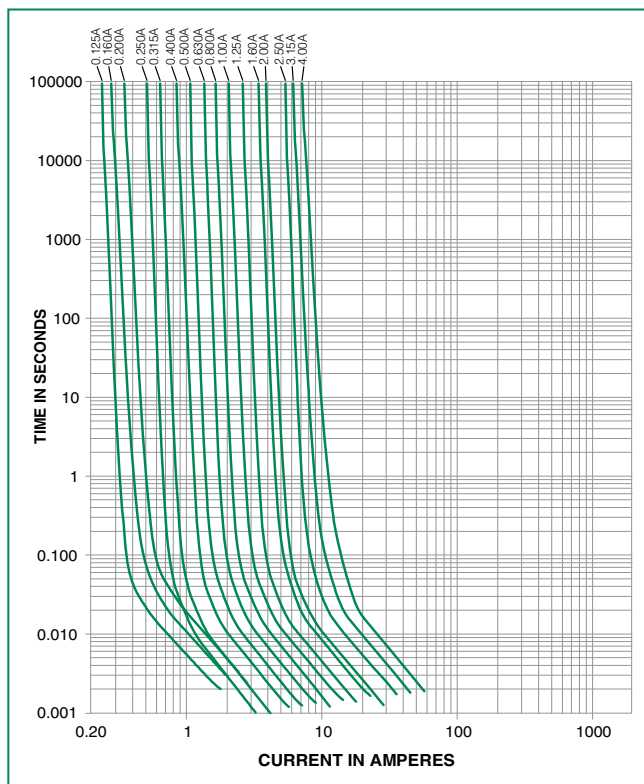
Amp Code	Rated Current	Marking Code*	Voltage Rating	Breaking Capacity	Cold Resistance 0.1 x I _N max. (mΩ)	Power Dissipation 1.0 x I _N max. (mW)	Melting Integral 10 x I _N max. (A²s)	Agency Approvals 
0125	125 mA	SP13	65 V	50A / 65 VAC/DC 50-60 Hz cosφ=1.0	3400	190	0.005	x
0160	160 mA	SP16	65 V		2450	210	0.0095	x
0200	200 mA	SP20	65 V		1750	240	0.019	x
0250	250 mA	SP25	65 V		195	52	0.012	x
0315	315 mA	SP32	65 V		155	65	0.018	x
0400	400 mA	SP40	65 V		120	85	0.034	x
0500	500 mA	SP50	65 V		95	105	0.057	x
0630	630 mA	SP63	65 V		75	135	0.095	x
0800	800 mA	SP80	65 V		58	170	0.16	x
1100	1.00 A	SP100	65 V		46	220	0.27	x
1125	1.25 A	SP125	65 V		37	270	0.45	x
1160	1.60 A	SP160	65 V		29	350	0.77	x
1200	2.00 A	SP200	65 V		23	440	0.85	x
1250	2.50 A	SP250	65 V		18	550	2.2	x
1315	3.15 A	SP315	65 V		14	700	3.7	x
1400	4.00 A	SP400	65 V		12	900	6.5	x

* Physical Marking on top of the device

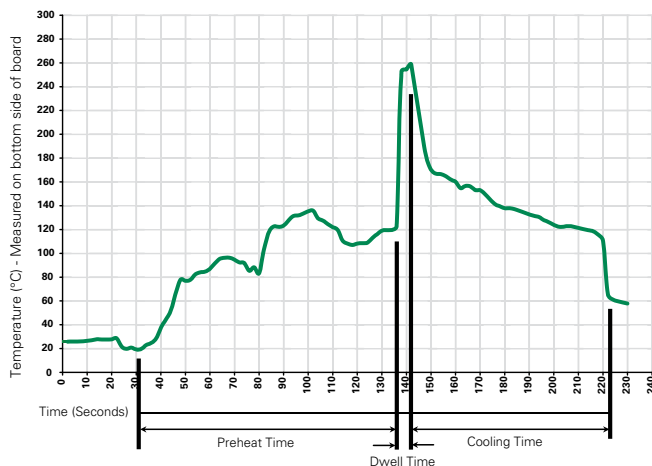
Temperature Derating Curve



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.

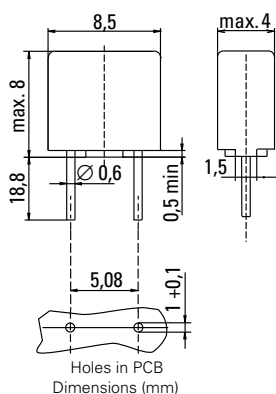
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

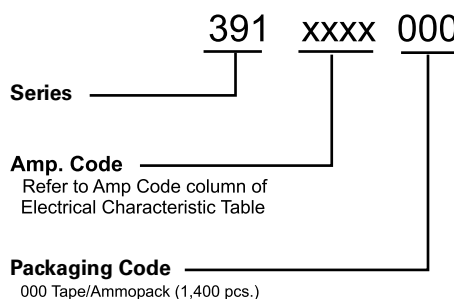
Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10 N (EN 60068-2-21)
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
Soldering Heat Resistance	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)

Operating Temperature	-40°C to +85°C (consider de-rating)
Climatic Category	-40°C to +85°C/21 days (EN 60068-1,-2-1,-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 (EN 60068-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10 g acceleration

Dimensions



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
391 Series				
Tape & Ammopack	N/A	1,400	000	N/A