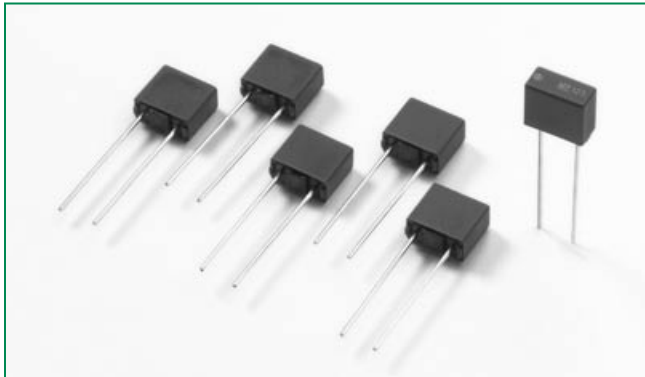


RoHS **Pb** **398 Series, TE5®, Modul Protector® Fuse**



**Description**

The 398 Series are TE5® short circuit protector, medium time-lag type, 65V rated fuses.

**Features**

- Reduced PCB space requirements
- Highly defined cut-off times
- Low internal resistance
- Irreversible physical separation
- Flame resistant encapsulated casing
- Available from 125mA to 4A
- Halogen free

**Agency Approvals**

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

**Applications**

- Microprocessor protection

**Electrical Characteristics**

% of Ampere Rating	Opening Time
300	10 Seconds, <b>Max.</b>

**Electrical Characteristics**

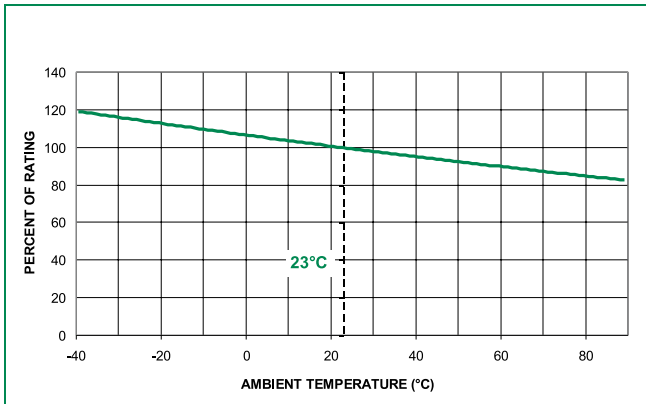
Amp Code	Rated Current	Marking Code*	Voltage Rating	Breaking Capacity	Cold Resistance 0.1 x I <sub>N</sub> typ. (mΩ)	Power Dissipation 1.0 x I <sub>N</sub> max. (mW)	Melting Integral 10 x I <sub>N</sub> typ. (A <sup>2</sup> s)	Agency Approvals 
0125	125mA	MP13	65V	50A / 65 VAC/DC 50-60 Hz cosφ=1.0	900	50	0.0093	x
0250	250mA	MP25	65V		355	50	0.045	x
0315	315mA	MP32	65V		260	60	0.081	x
0400	400mA	MP40	65V		186	75	0.18	x
0500	500mA	MP50	65V		155	90	0.2	x
0630	630mA	MP63	65V		115	120	0.37	x
0800	800mA	MP80	65V		85	140	0.64	x
1100	1.00A	MP100	65V		65	170	1.1	x
1125	1.25A	MP125	65V		48	210	2.3	x
1160	1.60A	MP160	65V		34	320	4.5	x
1200	2.00A	MP200	65V		26	425	7.8	x
1250	2.50A	MP250	65V		21	550	13	x
1315	3.15A	MP315	65V		16	650	23	x
1400	4.00A	MP400	65V		12	1000	40	x

\* Physical Marking on top of the device

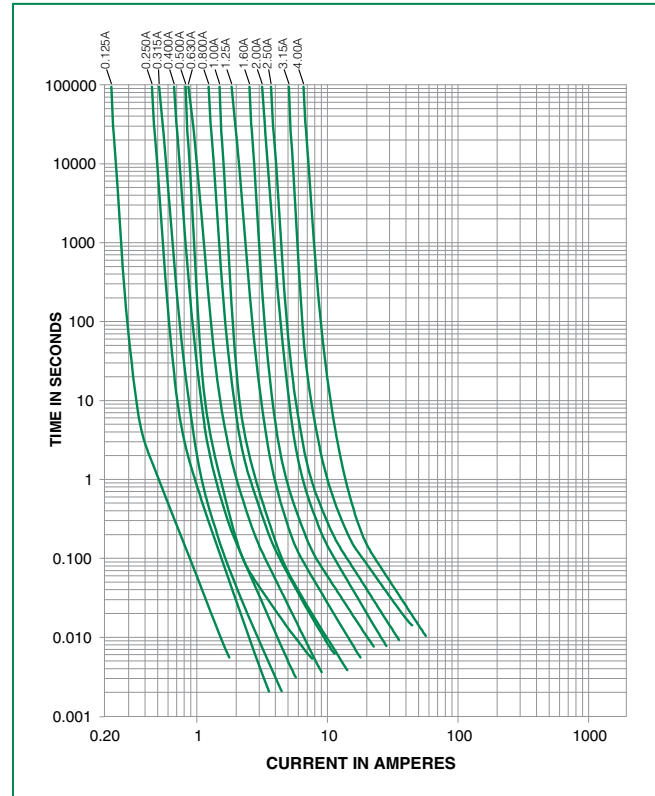
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

398 Series

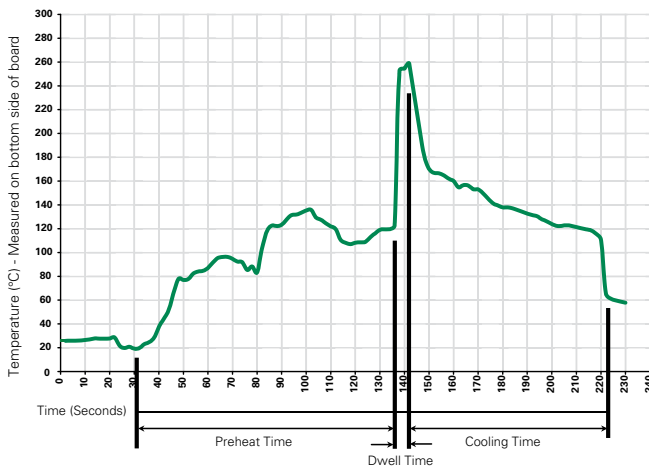
### Temperature Derating Curve



### Average Time Current Curves



### Soldering Parameters - Wave Soldering



#### Recommended Process Parameters:

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

#### Recommended Hand-Solder Parameters:

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

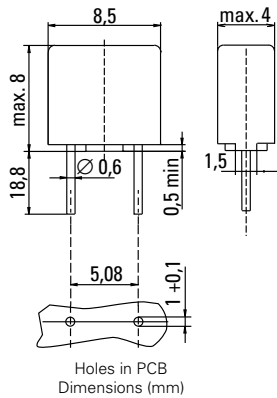
**Note: These devices are not recommended for IR or Convection Reflow process.**

**Product Characteristics**

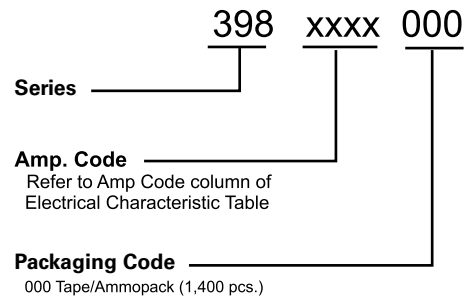
<b>Materials</b>	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-0 Round Pins: Copper, Tin-plated
<b>Lead Pull Strength</b>	10N (EN 60068-2-21)
<b>Solderability</b>	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
<b>Soldering Heat Resistance</b>	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering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

<b>Operating Temperature</b>	-40°C to +85°C (consider de-rating)
<b>Climatic Category</b>	-40°C to +85°C/21 days (EN 60068-1,-2-1,-2-2,-78)
<b>Stock Conditions</b>	+10°C to +60°C RH, ≤ 75% yearly average, without dew, maximum value for 30 days-95%
<b>Vibration Resistance</b>	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
<b>398 Series</b>				
Tape & Amp-pack	N/A	1,400	000	N/A

398 Series