



Description

TR5®, Time-lag type, 300V rated and designed in accordance to IEC60127-3.




Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- Halogen free

Applications

- Electronic Ballast

Agency Approvals

Agency	Agency File Number	Ampere Range
	5007679-1170-0038/92585	4A - 5A
	JET1896-31007-2001 JET1896-31007-1003	1A - 5A 6.3A - 10A
	E67006	1A - 10A




Electrical Characteristics for Series

% of Ampere Rating	Opening Time (1A-6.3A)
150%	1 Hour, Minimum
210%	120 sec., Maximum
275%	400 ms., Min.; 10 sec., Max.
400%	150 ms., Min.; 3 sec., Max.
1000%	20 ms., Min.; 150 ms., Max.

Electrical Characteristics for Series

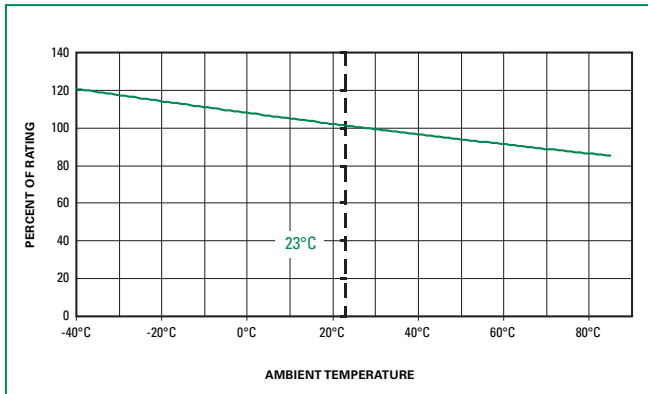
% of Ampere Rating	Opening Time (8A-10A)
150%	1 Hour, Minimum
210%	300 sec., Maximum
275%	1 sec., Min.; 20 sec., Max.
400%	150 ms., Min.; 3 sec., Max.
1000%	20 ms., Min.; 150 ms., Max.

Electrical Characteristics Specifications by Item

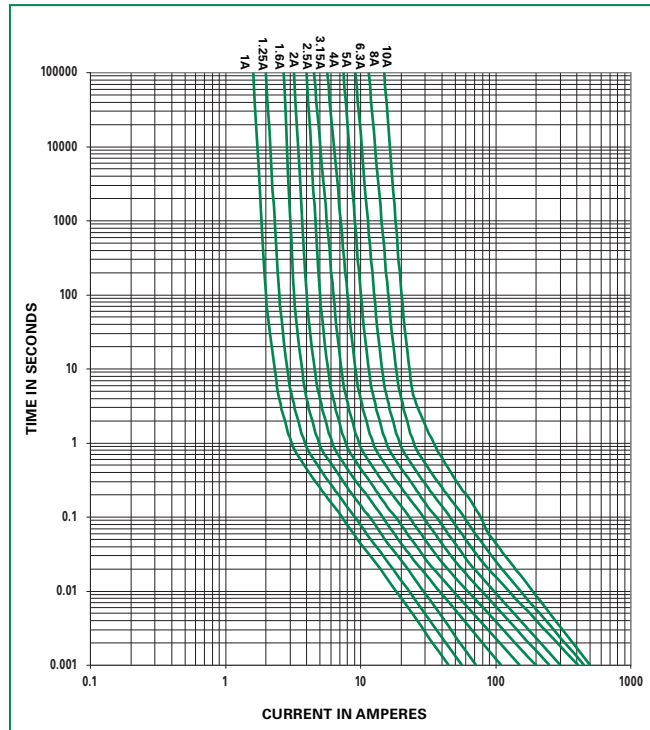
Amp Code	Amp Rating (A)	Max Voltage Rating (V)	Breaking Capacity 50-60Hz/cosφ =1	Voltage Drop 1.0 x 1 _N max. (mV)	Power Dissipation 1.5 x 1 _N max. (mW)	Melting Integral 10 x 1 _N min. (A ² s)	Agency Approvals		
									
1100	1.00	300	100A@300VAC 50A@300VAC	100	400	3.0		X	X
1125	1.25	300		95	465	4.5		X	X
1160	1.60	300		90	490	9.0		X	X
1200	2.00	300		85	670	12		X	X
1250	2.50	300		80	750	22		X	X
1315	3.15	300		75	900	32		X	X
1400	4.00	300	50A@300VAC	70	1200	58	X	X	X
1500	5.00	300		65	1250	90	X	X	X
1630	6.30	300		65	1400	105			X
1800	8.00	300		63	1600	180			X
2100	10.00	300		57	1600	260			X

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

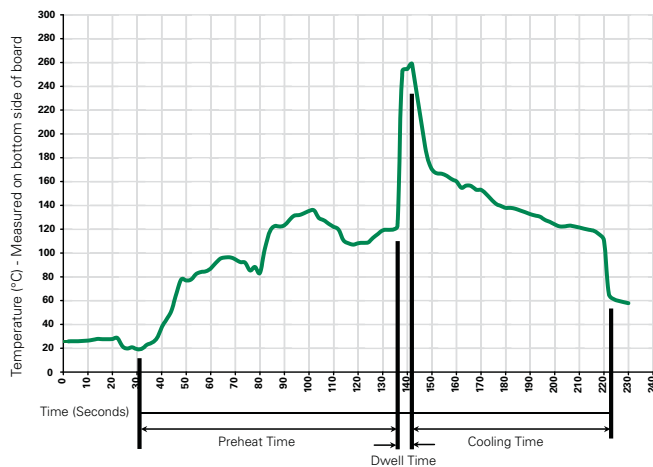
Temperature Derating Curve



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 PA6.6, UL 94 V0 Round Pins: tin-plated Copper
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 (IEC60068-2-20) 350°C, 3s (Soldering Iron)

Operating Temperature	-65°C to +125°C (based on internal thermal cycle test up to 125°C consider de-rating)
Climatic Category	-40°C / +85°C / 21days (EN60068-1,-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 15min. Each (EN60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10g acceleration

Dimensions



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

Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
383 Series				
Tape & Ampmopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0410	N/A