

P800L High-Reliability Solid Body Fuses

AEM, Inc. is the sole U.S. manufacturer of solid body current limiting fuses produced utilizing thick film technology with subsequent screening and qualification for spacecraft/satellite applications. AEM, Inc.'s P800L Series Fuses have been selected by most major space programs and have been in orbit for the past 38 years with zero failures.

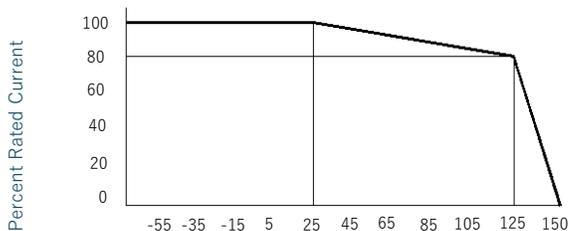
Features

- Solid body construction with hermetically sealed gold fusing elements.
- Consistent clearing times achieved at overload currents regardless of vacuum conditions.
- Solid body construction without outgassing and not subjected to the de-rating factors of MIL-STD-975.
- Solid body construction capable of withstanding greater vibration and shock exposure without damage.
- Positive temperature coefficient of fuse element causing resistance to increase (prior to opening) thereby preventing absolute short to the power source.
- Internal construction ensuring that arc, plasma, and vapor are contained within the fuse package during overload current conditions.
- Groups A/B data supplied with each shipment and Group C inspection optional.
- High-reliability fuse series with over 29 million hours of life testing without a failure.

Applications

- Satellite/Spacecraft
- Aerospace
- Avionics
- Military

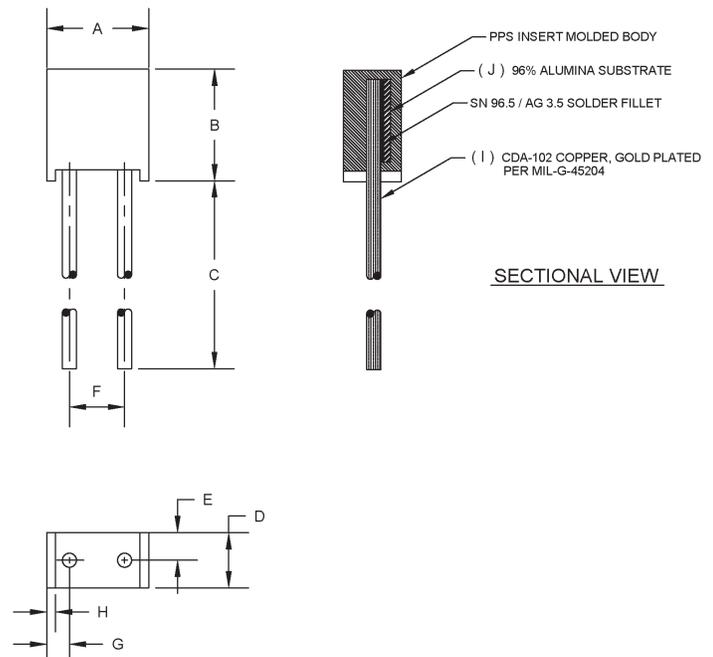
Derating Curve



Case Temperature (DEGREES C)

Product Dimensions (Inches)

Dimension	Figure 1*
A	.625 max.
B	.440 max.
C	2.00 min.
D	.325 max.
E	.1525 typ.
F	.350±.010
G	.125 typ.
H	.032 typ.
I	.051±.002 Dia.
J	.040 typ.



* See table on Page 2

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Electrical Characteristics

Fuse Part Numbers / Ratings			DC Resistance (Ohms) / 1		Overload Interrupt Time (Seconds) / 2			Maximum I ² T (Ampere ² Seconds)		
Part Number	Maximum Voltage (VDC)	Current Rating (Amps)	Minimum	Maximum	250% Nominal Rating	400% Nominal Rating	600% Nominal Rating	250% Nominal Rating	400% Nominal Rating	600% Nominal Rating
P800L-72-2.0	72	2	0.045	0.075	1.0-150.0	0.004-0.060	0.0008-0.008	3750.000	3.840	1.152
P800L-72-3.0	72	3	0.0285	0.0475	.500-30.0	0.006-0.090	0.0008-0.008	1687.500	12.960	2.592
P800L-72-4.0	72	4	0.0217	0.0363	.500-30.0	0.008-0.120	0.0007-0.014	3000.000	30.720	8.064
P800L-72-5.0	72	5	0.0187	0.0313	.500-30.0	0.006-0.090	0.0008-0.016	4687.500	36.000	14.400
P800L-72-7.5	72	7.5	0.012	0.02	.500-30.0	0.005-0.080	0.0008-0.012	10546.875	72.000	24.300
P800L-72-10.0	72	10	0.0075	0.0125	.500-30.0	0.010-0.150	0.0008-0.012	18750.000	240.000	43.200
P800L-72-15.0	72	15	0.0045	0.0075	.500-20.0	0.010-0.150	0.0008-0.012	28125.000	540.000	97.200
P800L-80-2.0	80	2	0.045	0.075	1.0-150.0	0.004-0.060	0.0008-0.008	3750.000	3.840	1.152
P800L-80-3.0	80	3	0.0285	0.0475	.500-30.0	0.006-0.090	0.0008-0.008	1687.500	12.960	2.592
P800L-80-4.0	80	4	0.0217	0.0363	.500-30.0	0.008-0.120	0.0007-0.014	3000.000	30.720	8.064
P800L-80-5.0	80	5	0.0187	0.0313	.500-30.0	0.006-0.090	0.0008-0.016	4687.500	36.000	14.400
P800L-80-7.5	80	7.5	0.012	0.02	.500-30.0	0.005-0.080	0.0008-0.012	105645.875	72.000	24.300
P800L-80-10.0	80	10	0.0075	0.0125	.500-30.0	0.010-0.150	0.0008-0.012	18800	240.000	43.200
P800L-80-15.0	80	15	0.0045	0.0075	.500-20.0	0.010-0.150	0.0008-0.012	28100	540.000	97.200

Notes:

1/ DC Resistance is measured at from 0.1 to 10 milliamperes of current or calculated from the measured voltage drop at a current not exceeding 10% of the rated current of the fuse.

2/ Overload interrupt times are for case temperatures of +25 °C - +125 °C. Case temperatures outside of this range may affect overload interrupt times.

