



## P800L High-Reliability Solid Body Fuses



AEM, Inc. is the sole U.S. manufacturer of solid body current limiting fuses produced utilizing hermetically sealed gold fusing elements 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 29 years with *zero failures*.

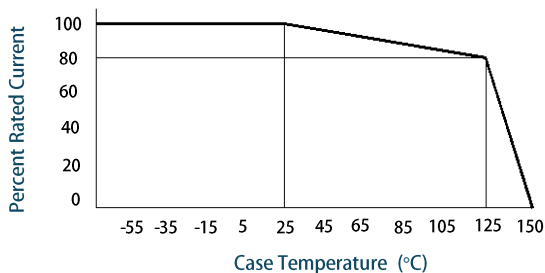
### Features

- 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

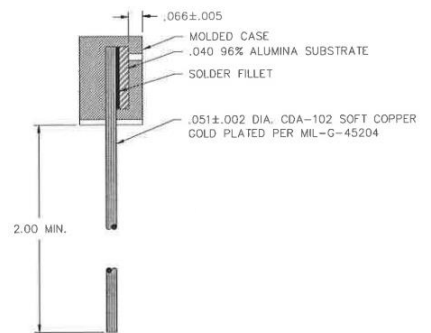
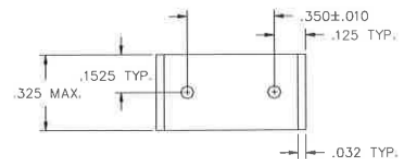
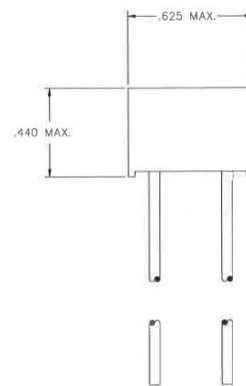
- Satellite / Spacecraft
- Aerospace
- Avionics
- Military

### Derating Curve



### Product Dimensions

(Inches)



Sectional View

# AEM, INC.'s P800L High-Reliability Solid Body Fuses

## Electrical Characteristics

Fuse Part Number / Ratings			DC Resistance (Ohms) / 1		Overload Interrupt Time (Seconds) / 2			Maximum I <sup>2</sup> t (A2 Sec)		
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	0.0450	0.0750	1.0-150.0	0.004-0.060	0.0008-0.008	3750	3.84	1.15
P800L-72-3.0	72	3.0	0.0285	0.0475	.500-30.0	0.006-0.090	0.0008-0.008	1690	13.0	2.59
P800L-72-4.0	72	4.0	0.0217	0.0363	.500-30.0	0.008-0.120	0.0007-0.014	3000	30.7	8.06
P800L-72-5.0	72	5.0	0.0187	0.0313	.500-30.0	0.006-0.090	0.0008-0.016	4690	36.0	14.4
P800L-72-7.5	72	7.5	0.0120	0.0200	.500-30.0	0.005-0.080	0.0008-0.012	10500	72.0	24.3
P800L-72-10.0	72	10.0	0.0075	0.0125	.500-30.0	0.010-0.150	0.0008-0.012	18800	240	43.2
P800L-72-15.0	72	15.0	0.0045	0.0075	.500-20.0	0.010-0.150	0.0008-0.012	28100	540	97.2
P800L-80-2.0	80	2.0	0.0450	0.0750	1.0-150.0	0.004-0.060	0.0008-0.008	3750	3.84	1.15
P800L-80-3.0	80	3.0	0.0285	0.0475	.500-30.0	0.006-0.090	0.0008-0.008	1690	13.0	2.59
P800L-80-4.0	80	4.0	0.0217	0.0363	.500-30.0	0.008-0.120	0.0007-0.014	3000	30.7	8.06
P800L-80-5.0	80	5.0	0.0187	0.0313	.500-30.0	0.006-0.090	0.0008-0.016	4690	36.0	14.4
P800L-80-7.5	80	7.5	0.0120	0.0200	.500-30.0	0.005-0.080	0.0008-0.012	10500	72.0	24.3
P800L-80-10.0	80	10.0	0.0075	0.0125	.500-30.0	0.010-0.150	0.0008-0.012	18800	240	43.2
P800L-80-15.0	80	15.0	0.0045	0.0075	.500-20.0	0.010-0.150	0.0008-0.012	28100	540	97.2

### 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.

