



P600L 180V 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 P600L Series Fuses have been selected by most major space programs and have been in orbit for the past 37 years with *zero failures*.

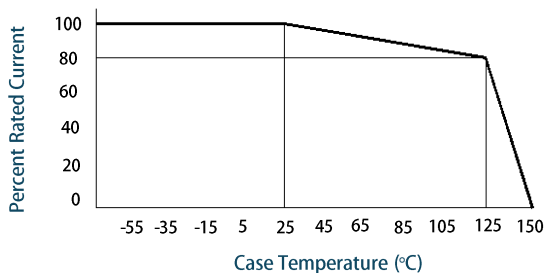
Features

- 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

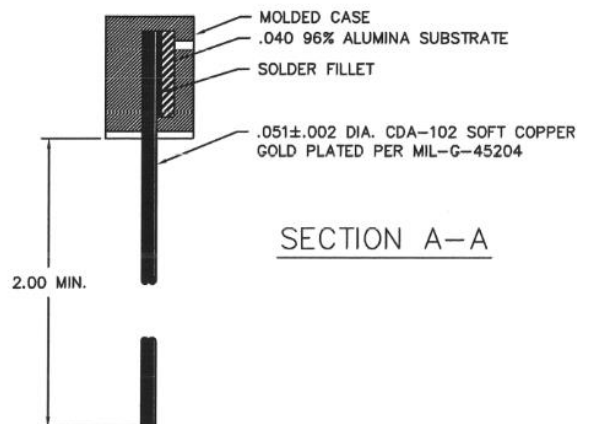
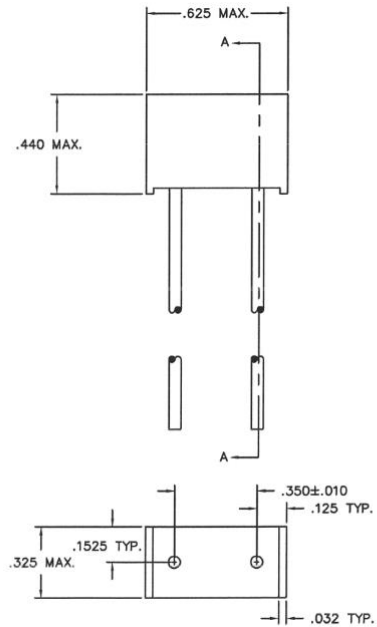
- Satellite / Spacecraft
- Aerospace
- Avionics
- Military

Derating Curve



Product Dimensions

(Inches)



AEM, INC.'s P600L 180V High-Reliability Solid Body Fuses

Electrical Characteristics

Fuse Part Number / Ratings			DC Resistance (Ohms) / 1		Overload Interrupt Time (Seconds) / 2 / 3 / 4			Maximum I ² t (A ² 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
P600L-180-2.0	180	2.0	0.1013	0.1688	0.01-1.0	0.001-0.015	0.0003-0.006	25.0	0.960	0.864
P600L-180-3.0	180	3.0	0.0698	0.1163	0.01-1.0	0.001-0.015	0.0003-0.006	56.3	2.16	1.94
P600L-180-4.0	180	4.0	0.0525	0.0875	0.01-1.0	0.001-0.015	0.0003-0.006	100	3.84	3.46
P600L-180-5.0	180	5.0	0.0345	0.0575	0.01-1.0	0.001-0.015	0.0003-0.006	156	6.00	5.40
P600L-180-6.0	180	6.0	0.0300	0.0500	0.01-1.0	0.001-0.015	0.0003-0.006	225	8.64	7.78
P600L-180-7.5	180	7.5	0.0263	0.0438	0.01-1.0	0.001-0.015	0.0003-0.006	352	13.5	12.2
P600L-180-8.0	180	8.0	0.0240	0.0400	0.01-1.0	0.001-0.015	0.0003-0.006	400	15.4	13.8
P600L-180-10.0	180	10.0	0.0200	0.0240	0.1-5.0	0.005-0.030	0.001-0.010	3130	48.0	36.0
P600L-180-15.0	180	15.0	0.0140	0.0165	0.1-5.0	0.005-0.030	0.001-0.010	7030	108	81.0

Notes:

1/ DC Resistance is measured at current levels less than or equal to 10% of rated current.

2/ Overload interrupt times at -55 °C and 250% overload current shall be as follows:

a) Fuses with ratings less than 3/8 amperes shall open in 60 seconds maximum.

b) Fuses with ratings from 3/8 to 1.0 ampere shall open in 10 seconds maximum.

c) Fuses with ratings greater than 1.0 ampere shall open in 5 seconds maximum.

3/ Maximum Pt at -55 °C and 250% overload current may be greater than indicated. To calculate maximum Pt at a case temperature of -55 °C and 250% overload current, multiply the P product by the maximum blow times indicated in Note 2 above.

AEM, Inc.'s SK406 series is a modified lead configuration of the P600L, providing the design engineer additional flexibility of surface mounting the popular P600L series.

