

240 Watts

AM80A

Total Power: 240 Watts
Input Voltages: 24V, 48V, 150V, 300V, or 320V
No. of Outputs: Single



Special Features

- 1MHz Fixed frequency
- 100°C Baseplate operating temperature (no derating)
- Low output ripple and noise
- Excellent transient response
- Safety isolated low voltage interface with ALP™ linear control
- High reliability - over 1 million hours MTBF
- Wide input voltage range
- Parallelable with accurate current sharing
- Current and temperature monitoring outputs

Environmental

Operating temperature (baseplate):
-20°C to +100°C

Storage temperature: -40°C to +105°C

Overtemperature protection: 110°C typical

MTBF: > 1 million hours (50°C baseplate)

Environmental

| | | |
|------------|--------------|------------------------|
| UL | UL 1950 | E132002 |
| CSA | CSA22.2-234 | LR53982C |
| | CSA22.2-950 | |
| VDE | IED950 | 20396-3336-1005 & 1006 |
| EN | 60950 | |
| CE | CEMark (LVD) | |

Electrical Specs

Input

| | |
|-------------|---|
| Input Range | 18 - 36V or 36 - 72 VDC or 90 - 200 VDC or 180 - 400 VDC |
| Efficiency | 84% typical (5V @ 40A) 87% typical (12V @ 18A) |

Output

| | |
|------------------------|--|
| Load Regulation | 0.1% typical down to no load |
| Line Regulation | 0.02% typical |
| Noise/Ripple | 50 mV typical (output below 5V) 1% typical (output 5V and over) |
| Remote sense | Up to 0.5V |
| Output Voltage | |
| Adjust Range | ±20% of nominal |
| Transient Response | 3% typical deviation with 300µs recovery (25-75% full load) |
| Current Share Accuracy | 3% typical |
| Overvoltage Protection | 115% Vo (nominal) |
| Current Limit | 110% Io maximum |

Control

| | |
|------------------------|---|
| Voltage Adjust | 80 to 120% Vo linear programming |
| Enable | TTL compatible (low to enable) |
| Current Limit Adjust | 20 to 100% Io linear programming |
| Clock Input | |
| (external sync) | 3.3 to 5.5Vp-p @ 1MHz ± 10% |
| Clock Output | |
| (internal clock) | 4.5Vp-p typical @ 1MHz ± 0.5% |
| Power Good | |
| Identification | High (Vo) = power good |
| Temperature | |
| Monitor Output | 10 mV/°K (2.73V = 0°C) |
| Current Monitor Output | 0 to 1mA (1 mA = 100% Io rated) |
| Over Voltage | |
| Protection Adjust | 110 to 150% Vo linear programming by voltage or resistor |

Notes

Nominal values apply with sense pins connected and other control pins unconnected.

Specifications subject to change without notice.

AMERICAS

5810 Van Allen Way
 Carlsbad, CA 92008
 Telephone: 760-930-4600
 Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park
 Merry Hill, Dudley
 West Midlands, DY5 1LX, UK
 Telephone: 44 (1384) 842-211
 Facsimile: 44 (1384) 843-355

ASIA

Units 2111-2116, Level 21
 Tower1, Metroplaza
 223, Hing Fong Road
 Fwai Fong, New Territories
 Hong Kong
 Telephone: 852-2437-9662
 Facsimile: 852-2402-4426



AM80A

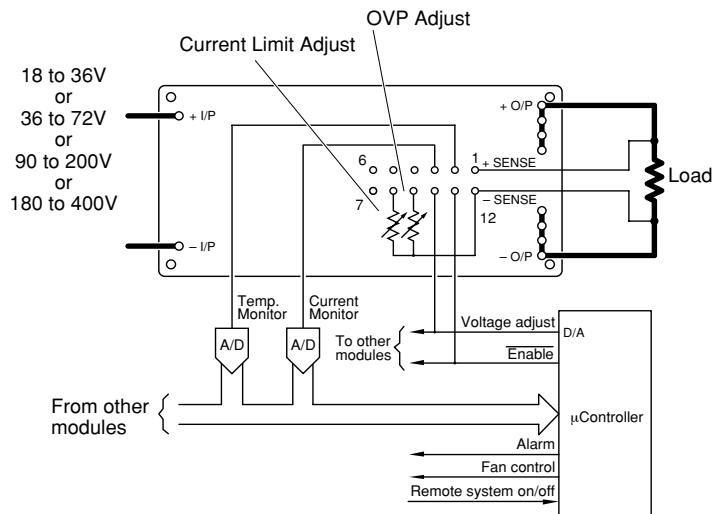
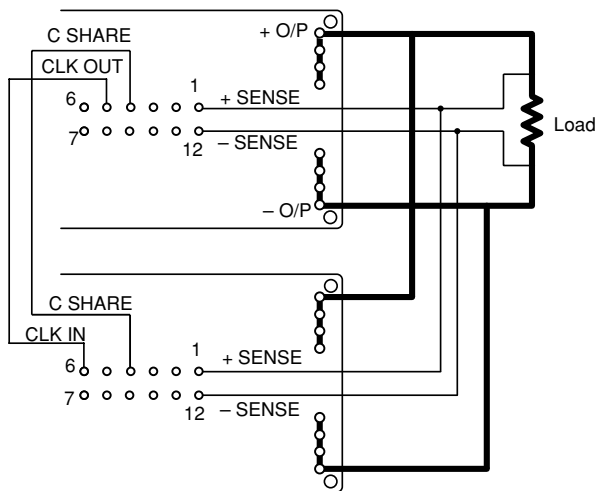
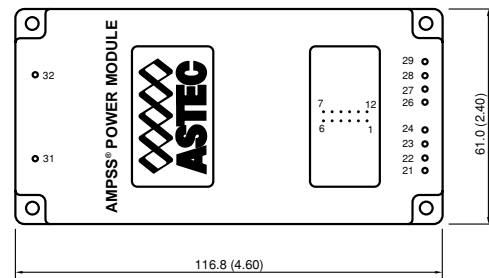
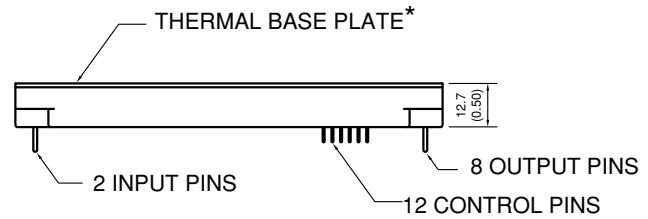
Ordering Information

| Input Voltage | Output Voltage | Output Current | Model Number | Input Voltage | Output Voltage | Output Current | Model Number |
|---------------|----------------|----------------|---------------------|---------------|----------------|----------------|-------------------|
| 300V | 2.2V | 60A | AM80A-300L-022F60 | 150V | 6.5V | 33A | AM80A-150L-065F33 |
| 300V | 3.3V | 50A | AM80A-300L-033F50 | 48V | 1.2V | 60A | AM80A-048L-012F60 |
| 300V | 5V | 40A | AM80A-300L-050F40 | 48V | 2.2V | 60A | AM80A-048L-022F60 |
| 300V | 6.5V | 33A | AM80A-300L-065F33 | 48V | 3.3V | 50A | AM80A-048L-033F50 |
| 300V | 12V | 18A | AM80A-300L-120F18 | 48V | 5V | 40A | AM80A-048L-050F40 |
| 300V | 15V | 16A | AM80A-300L-150F16 | 48V | 12V | 18A | AM80A-048L-120F18 |
| 300V | 24V | 10A | AM80A-300L-240F10 | 48V | 15V | 16A | AM80A-048L-150F16 |
| 300V | 28V | 9A | AM80A-300L-280F09 | 48V | 24V | 10A | AM80A-048L-240F10 |
| 320V | 28V | 9A | AM80A-320L-280F09** | 24V | 6.5V | 27A | AM80A-024L-065F27 |

Please contact Astec for information on other output voltages, power ranges and configurations.

Pin Assignments

| Input | Output | Control Pins |
|---------|--------|--------------|
| 31. +ve | 21. | 1. +SENSE |
| 32. -ve | 22. | 2. TEMP MON |
| | 23. | 3. C MON |
| | 24. | 4. C SHARE |
| | 26. | 5. CLK OUT |
| | 27. | 6. CLK IN |
| | 28. | 7. PG/ID |
| | 29. | 8. C LIM ADJ |
| | | 9. OVP ADJ |
| | | 10. V ADJ |
| | | 11. ENABLE |
| | | 12. -SENSE |



Astec Integrated Power