

240 Watts

AM80A

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



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)
 Up to 0.5V
 Remote sense
 Output Voltage
 Adjust Range $\pm 20\%$ of nominal
 Transient Response 3% typical deviation with 300 μ s recovery
 (25-75% full load)
 Current Share Accuracy 3% typical
 Overvoltage Protection 115% V_o (nominal)
 Current Limit 110% I_o maximum

Control

Voltage Adjust 80 to 120% V_o linear programming
 Enable TTL compatible (low to enable)
 Current Limit Adjust 20 to 100% I_o linear programming
 Clock Input (external sync) 3.3 to 5.5Vp-p @ 1MHz $\pm 10\%$
 Clock Output (internal clock) 4.5Vp-p typical @ 1MHz $\pm 0.5\%$
 Power Good Identification High (V_o) = power good
 Temperature
 Monitor Output 10 mV/ $^{\circ}$ K (2.73V = 0 $^{\circ}$ C)
 Current Monitor Output 0 to 1mA (1 mA = 100% I_o rated)
 Over Voltage Protection Adjust 110 to 150% V_o 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.

Special Features

- 1MHz Fixed frequency
- 100 $^{\circ}$ C Baseplate operating temperature (no derating)
- Low output ripple and noise
- Excellent transient response
- Safety isolated low voltage interface with ALPTM 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 $^{\circ}$ C to +100 $^{\circ}$ C

Storage temperature: -40 $^{\circ}$ C to +105 $^{\circ}$ C

Overtemperature protection: 110 $^{\circ}$ C typical

MTBF: > 1 million hours (50 $^{\circ}$ 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)	

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

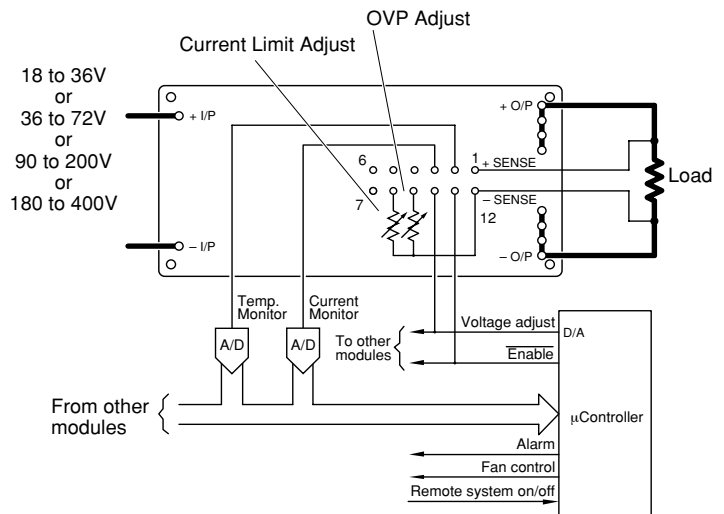
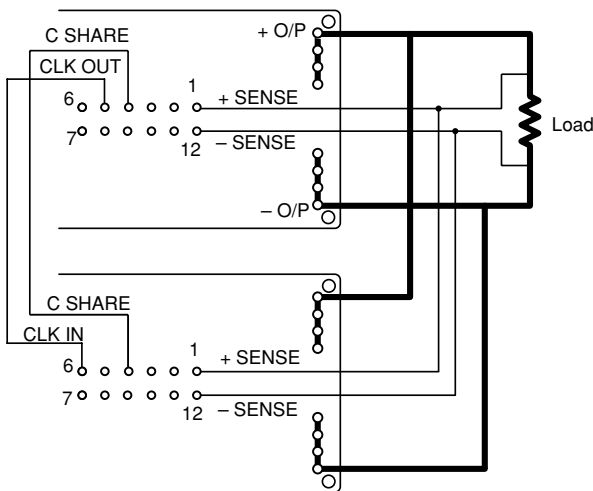
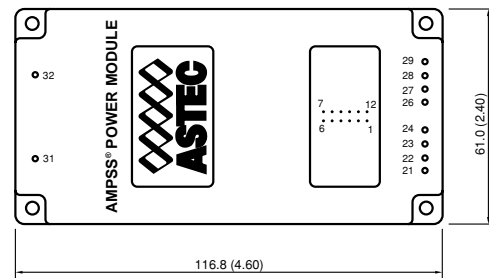
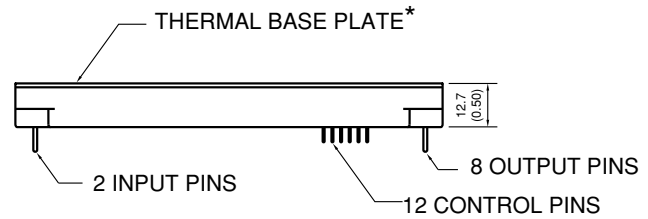
Ordering Information

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