

# 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

<b>UL</b>	UL 1950	E132002
<b>CSA</b>	CSA22.2-234	LR53982C
	CSA22.2-950	
<b>VDE</b>	IED950	20396-3336-1005 & 1006
<b>EN</b>	60950	
<b>CE</b>	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.

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AM80A

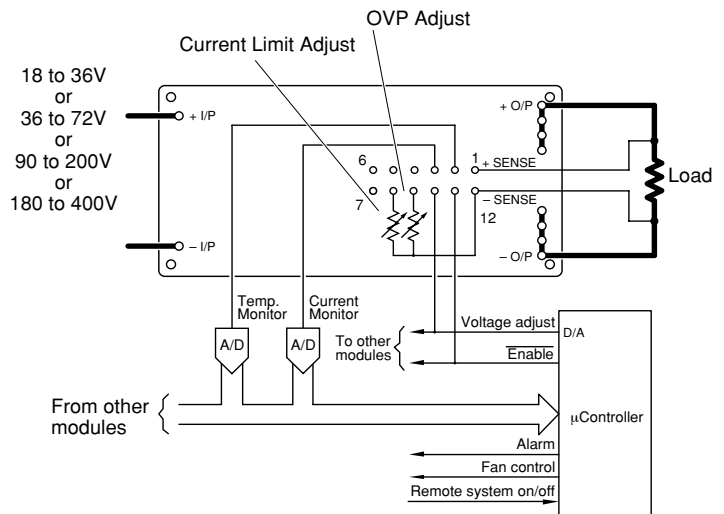
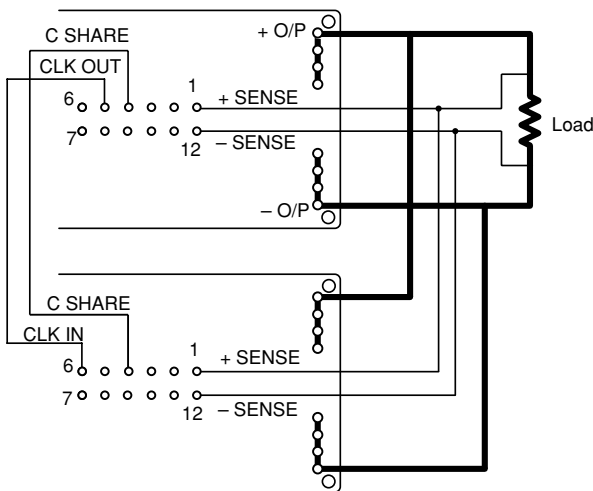
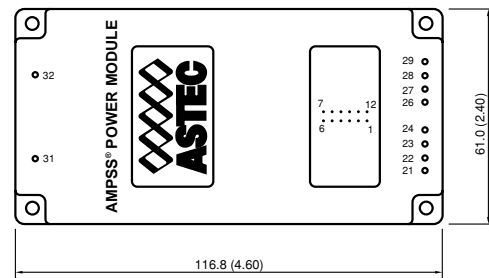
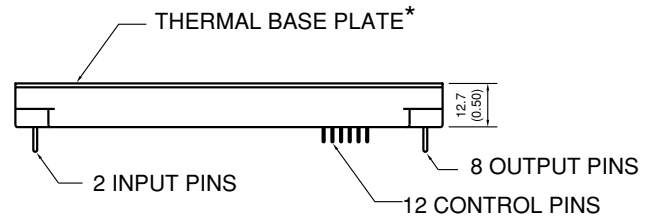
## Ordering Information

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