

300 Watts

BM80A

Total Power: 300 Watts
Input Voltages: 48V or 300V
No. of Outputs: Single



Special Features

- 300W Continuous power at 85°C baseplate temperature
- 54W/in³ (3.3W/cm³)
- High efficiency - 83% at full rated output
- 1MHz Fixed frequency
- 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

Environmental

Operating temperature (baseplate):
-20°C to +85°C

Storage temperature: -40°C to +105°C

Overtemperature protection: 90°C typical

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

Safety

UL UL 1950

CSA CSA22.2-234 E132002

CSA22.2-950 LR53982C

VDE IEC950 20396-3336-1005 & 1006

EN60950

CE CEMark (LVD)

Electrical Specs

Input

Input Range 180 to 400 VDC or 36 to 72 VDC
 Efficiency 83% typical (5V @ 60A)

Control

Voltage Adjust 80 to 120% V_o
 Enable TTL compatible (low to enable)
 Current Limit Adjust 20 to 100% I_o
 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/°K (2.73V = 0°C)
 Current Monitor Output 0 to 1mA (1 mA = 100% I_o rated)
 Over Voltage
 Protection Adjust 110 to 150% V_o linear programming

Output

Load Regulation 0.1% typical down to no load
 Line Regulation 0.02% typical
 Noise/Ripple 50mV typical
 Remote sense Up to 0.5V
 Output Voltage
 Adjust Range $\pm$ 20% of nominal output
 Transient Response 3% typical deviation with 250 μ s recovery (25-75% full load)
 Current Share Accuracy 3% typical
 Overvoltage Protection 115% V_o (nominal)
 Current Limit 110% I_o max

Notes

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

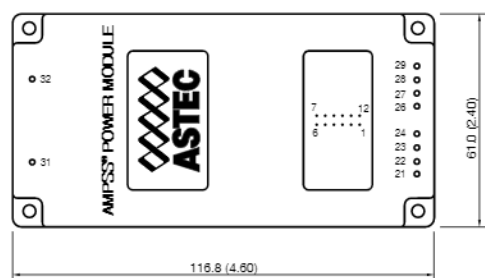
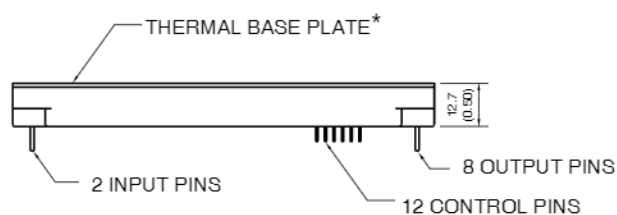
Specifications subject to change without notice.

Ordering Information

Input Voltage	Output Voltage	Output Current	Model Number	Input Voltage	Output Voltage	Output Current	Model Number
300V	5V	60A	BM80A-300L-050F60	48V	5V	60A	BM80A-048L-050F60
300V	3.3V	70A	BM80A-300L-033F70	48V	3.3V	70A	BM80A-048L-033F70
300V	2.2V	75A	BM80A-300L-022F75				
300V	2.2V	85A	BM80A-300L-022F85				
300V	3.3V	90A	BM80A-300L-033F90				

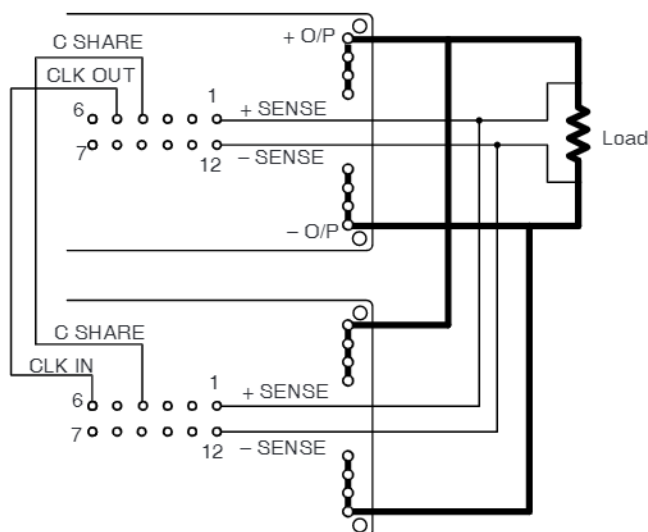
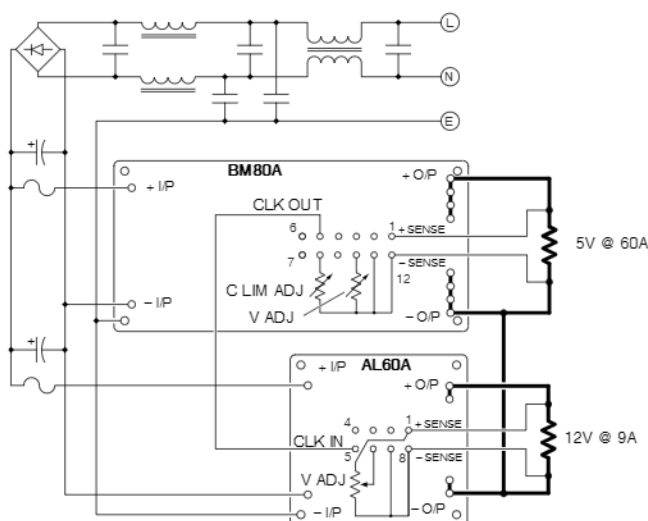
Pin Assignments

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



Dimensions

Connection example for a 400W dual output power supply using BM80A 300W and AL60A 100W modules



Parallel Connections