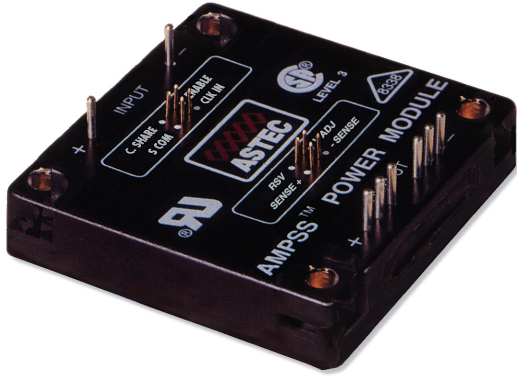


# 50 Watts

## AK60A

Total Power: 50 Watts  
 Input Voltages: 24V  
 No. of Outputs: Single



### Electrical Specs

#### Input

Input Range 18 to 36 VDC  
 Efficiency 83% typical (5V @ 10A);  
 87% typical (12V @ 4.2A)

#### Output

Load Regulation 0.2% typical  
 Line Regulation 0.2% typical  
 Noise/Ripple 150 mV typical (output below 5V)  
 3% typical (output 5V and over)  
 Remote sense Up to 0.5V  
 Output Voltage ±10% of nominal output  
 Adjust Range 10% maximum deviation with 500 $\mu$ s  
 (25-75% full load) recovery  
 Transient Response 130% nominal  $V_o$   
 160% nominal  $V_o$  (2.2V output)  
 140% nominal  $V_o$  (3.3V output)  
 115%  $I_o$  maximum  
 Overvoltage Protection  
 Current Limit

#### Control

Voltage Adjust 90 to 110%  $V_o$   
 Enable TTL compatible (low to enable)

### Special Features

- High efficiency - up to 87%
- 500 KHz Fixed frequency
- 100°C Baseplate operating temperature (no derating)
- Low output ripple and noise
- Excellent transient response
- High reliability - over 1 million hours MTBF
- Wide input voltage range
- TTL compatible enable control
- Adjustable output voltage
- Overtemperature and short circuit protection

### Environmental

Operating temperature (baseplate):  
 -40°C to +100°C  
 Storage temperature: -55°C to +105°C  
 Overtemperature protection: 110°C typical  
 MTBF: > 1 million hours (50°C baseplate)

### Safety

UL	UL 1950	E182206
CSA	CSA22.2-234 CSA22.2-950	LR53982C
VDE	IEC950	20396-3336-1013*
EN	60950*	
CE	CEMark (LVD)*	

\* On selected models

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

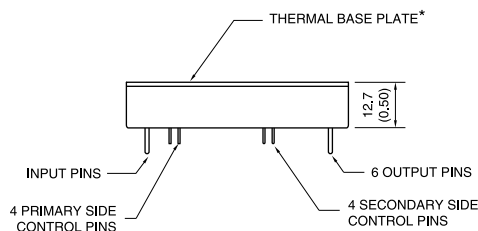


AK60A

## Ordering Information

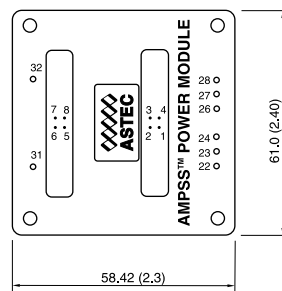
Input Voltage	Output Voltage	Output Current	Model Number
24V	2.2V	10A	AK60A-024L-022F10G
24V	3.3V	10A	AK60A-024L-033F10G
24V	5V	10A	AK60A-024L-050F10G
24V	12V	4.2A	AK60A-024L-120F04G
24V	15V	3.3A	AK60A-024L-150F03G
24V	24V	2A	AK60A-024L-240F02G

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



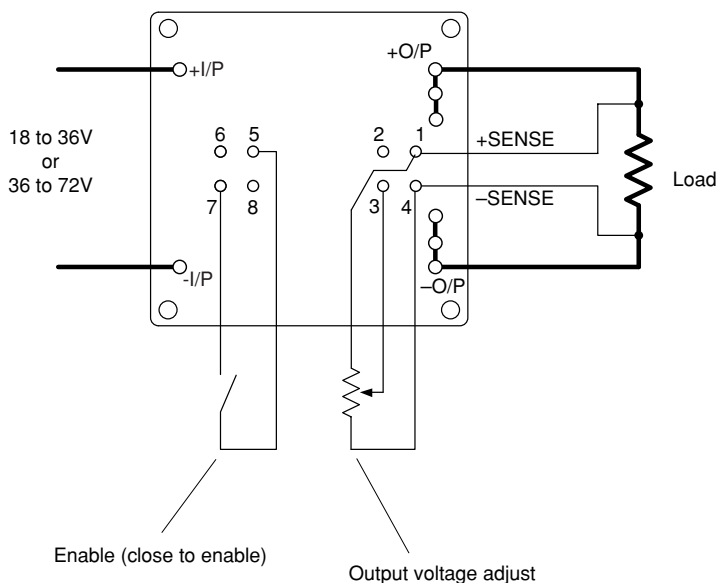
## Pin Assignments

Input	Output	Control Pins
31. +ve	22. +ve	1. +SENSE
32. -ve	23. +ve	2. RSV
	24. +ve	3. V ADJ
	26. -ve	4. -SENSE
	27. -ve	5. S COM
	28. -ve	6. C. SHARE
		7. ENABLE
		8. CLK IN



### Notes:

- Nominal values apply with sense pins connected and other control pins unconnected.
- Specifications subject to change without notice.
- Warranty: 1 yr



Astec Integrated Power