

# AA60A

60 Watts



## AA60A Series - Wide Input - Dual Output

Total Power	60 Watts
Input Voltages	24V TO 48V
# of Outputs	Dual 5V/3.3V & 3.3V/2.5V

### SPECIAL FEATURES

- Output loadsharing
- 24V and 48V DC Input
- Unencapsulated 2.3" x 2.4" x 0.50" pkg.
- 100°C baseplate temperature
- Trim feature, both rails
- Industry standard pin-out
- Enable (on/off)
- Thermal protection

### ENVIRONMENTAL

Operating case temperature range:  
-40°C to +105°C

Storage temperature: -40°C to +105°C

Humidity: 5% to 100% (non-condensing)

### SAFETY

UL UL 1950  
CAN22.2-950

TUV EN60950

### ELECTRICAL SPECIFICATIONS

#### Input

Input range ..... 19 to 60 VDC (36Vdc Nom.)  
 Input capacitance ..... 6.8μF (typical)  
 Efficiency ..... 77%-3.3V Full load, 84%-5.0V Full load  
 Input reverse ..... Fuse recommended 3A.MB  
 Voltage protection  
 Input surge voltage ..... 100V for 100ms  
 Input reflected ripple ..... <200mA (P-P)

#### Output

Voltage tolerance ..... ± 1%

Line regulation ..... ±0.2%(Typ), 1.0%(Max)

Load regulation ..... 1.0%  
Low Line - High Line @ Full Load

(10% to 100% load)  
1A minimum load per rail required

Ripple/noise ..... 100mV P-P(max)

Temperature coefficient ..... +0.02%/°C (max)

Short circuit protection ..... Continuous - Power Cycle

Oversvoltage protection ..... Shutdown (latching)

Transient response ..... 4% Vo max recovery <100μsec  
(25% to 75% step load change)

Switching frequency ..... 375 kHz typical

#### Control

Enable ..... on =2.5 to 5.5Vdc or open circuit  
off = 0 to 0.8Vdc

Ref. to -Vin. TTL compatible

Input current (enable off) ..... <2ma.

Output trim ..... Both outputs ±10% minimum

Thermal shutdown ..... 110°C typ (baseplate temperature)  
Auto reset

#### Isolation

I/O isolation ..... 1500 VDC

Isolation resistance ..... 1 x 10<sup>9</sup> ohms

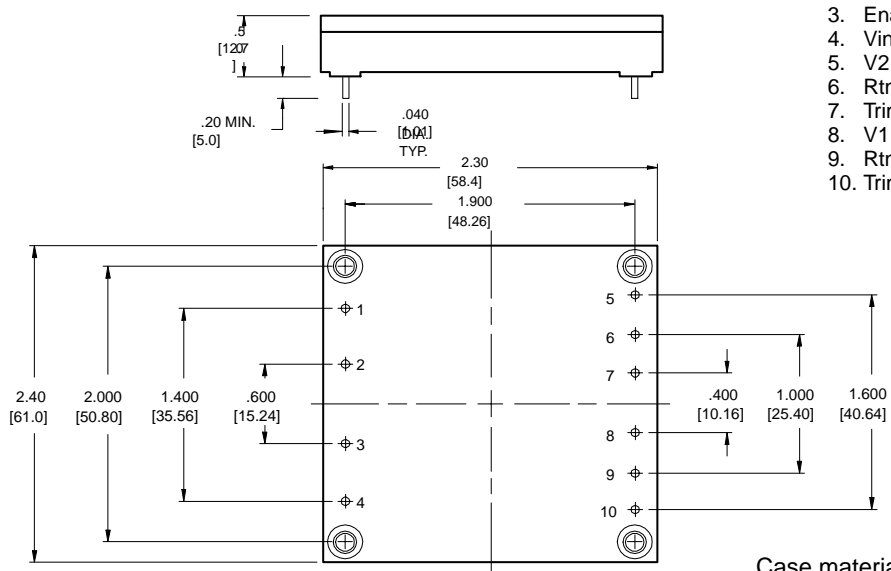
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## ORDERING INFORMATION

Input Voltage	Output 1 Voltage	Output 2 Voltage	Model Number
19 - 60VDC	5.0V @ 12A	3.3V @ 15A	AA60A-036L-050D033H

Note: Maximum output power not to exceed total 60W for 5/3.3V version.  
 The sum of output currents not to exceed 15 amps  
 Any output loading ratio within the maximum specified limits is possible.

## DIMENSIONS



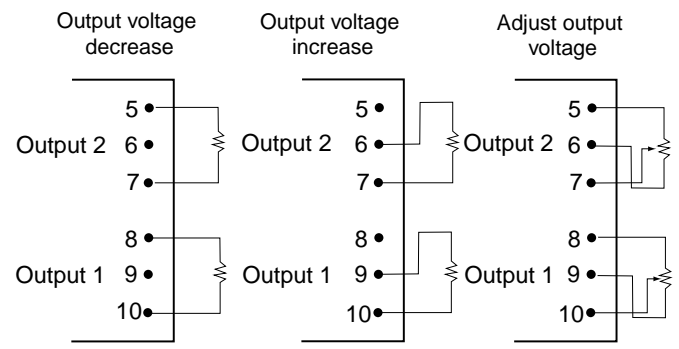
Mounting Inserts  
 M3 X .5 (4 places)

Case material: Metal base, plastic cover  
 Weight: 2.75 oz./ 78 grams

AA60A

## PIN ASSIGNMENT

- Single Output**
1. -Vin
  2. Case
  3. Enable (on/off)
  4. Vin+
  5. V2
  6. Rtn (V2)
  7. Trim (V2)
  8. V1
  9. Rtn (V1)
  10. Trim (V1)



## NOTES

1. 20MHz bandwidth. An external 2.2µf ceramic capacitor is recommended to be placed from +V out to -V out.
2. Requires a 2.2µf, 100V film capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise.
3. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
4. All specifications subject to change without notice. Mechanical drawings are for reference only.
5. Please refer to the Technical Reference Notes for more information.

