

AA50A

50 WATTS

NEW 3.3V Output

AA50A Series

Total Power	50 Watts
Input Voltages	24V or 48V
# of Outputs	Single, Triple



SPECIAL FEATURES

- Isolated Output
- 3.6:1 input range
- 5 year warranty
- 4.0" x 2.6" x 0.5" case
- Parallelable (singles only)
- Six sided shielding

ENVIRONMENTAL

Operating Temperature Ambient:
-40°C to +60°C FL, No derating

Operating Temperature (baseplate): 105°C max

Humidity (Non-condensing): 5% to 95%

Storage Temperature: -40°C to +105°C

MTBF: 312,000 hours (MIL HDBK-217F)

SAFETY

UL UL 1950

NOTES

Note 1- An external 0.1mf ceramic capacitor is recommended to be placed from the +V out to the -V out.

Note 2- Requires a 2.2mf, 100V film capacitor connected between +Vin and -Vin to meet FCC Class A and ETS300-381-1.

All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.

Specifications subject to change without notice.

ELECTRICAL SPECIFICATIONS

Input

Input Range	20 to 72 VDC
Input Surge Voltage	100V for 100ms
Input Reflected Ripple	<1MA See Note 2
Input Capacitance	2.2mF (typical)
Efficiency	82% typical
Input Reverse	Fuse recommended
Voltage Protection	

Control

Enable	TTL compatible (high to enable or open circuit)
Paralleling	Singles only

Output

Voltage Tolerance	± 1% (Main) <i>Output 2&3 (12V); +6.0%, -0%</i> <i>Output 2&3 (15V); +3%, -6%</i>
Line Regulation	±0.5% (Main); ±1% (Aux)
Load Regulation	± 1% (Main) 10%-FL; ± 5% (Aux); 10%L to FL, bal.
Ripple/Noise	1% mV P-P; bandwidth 20 MHz; See note 1 below
Temperature Coefficient	+0.02%/°C (max)
Short Circuit Protection	Continuous- Power Cycle Output 1,2 and 3
Overvoltage Protection	Zener (Main only)
Transient Response	300 msec (50% step)
Switching Frequency	330 kHz typical

Isolation

I/O Isolation	1500 VDC
Isolation Resistance	1 x 10 ⁹ ohms

ORDERING INFORMATION

Input Voltage	Output 1 Voltage	Output 2 Voltage	Output 3 Voltage	Maximum Power	Model Number
20-72VDC	3.3V @ 12.0A			40W	AA50A-048L-0335
20-72 VDC	5V @ 10.0A			50W	AA50A-048L-050S
20-72 VDC	12V @ 4.2A			50W	AA50A-048L-120S
20-72 VDC	15V @ 3.4A			50W	AA50A-048L-150S
20-72 VDC	5V @ 6.0A	12V @ 0.750mA	-12V @ 0.750mA	50W	AA50A-048L-050T120
20-72 VDC	5V @ 6.0A	15V @ 0.650mA	-15V @ 0.650mA	50W	AA50A-048L-050T150

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

PIN ASSIGNMENT

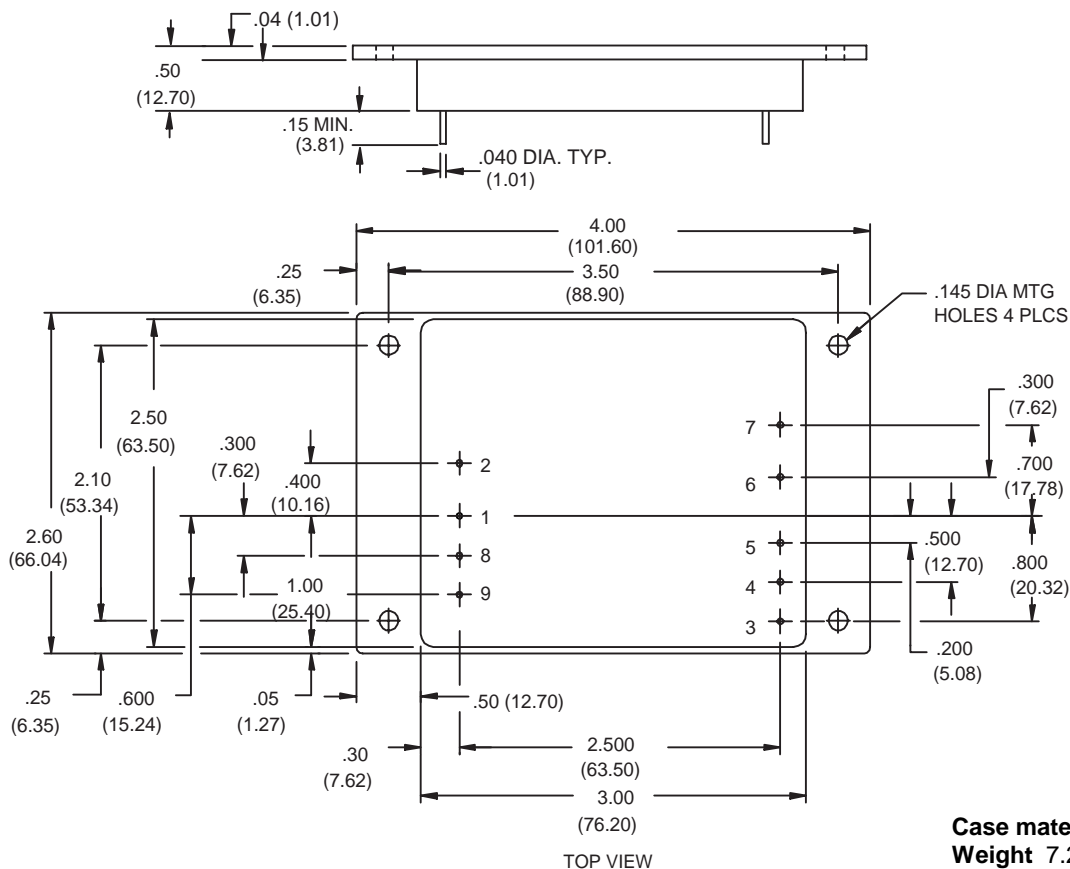
20-72V Input Single Output

1. +Vin
2. -Vin
3. NC (Reserved)
4. NC (Reserved)
5. NC (Reserved)
6. Output 1
7. COMM
8. Enable
9. Parallel

20-72V Input Triple Output

1. +Vin
2. -Vin
3. Output 2
4. RTN AUX
5. Output 3
6. Output 1
7. COMM
8. Enable
9. NC (Reserved)

DIMENSIONS



Case material six-sided, metal
Weight 7.2 oz./200 grams

TOP VIEW
ALL DIMENSIONS ARE IN INCHES (mm)