

25 Watts

AA25N

Total Power: 25 Watts
Input Voltages: 24V or 48V
No. of Outputs: Single, Dual, Triple



Special Features

- Ideal for telecom/networking applications
- High efficiency
- Unencapsulated 2.0" x 2.0" x 0.50" package.
- Integral heat spreader available
- 100°C Baseplate temperature
- Enable (on/off)
- Thermal protection
- 350kHz Switching frequency
- Under voltage lockout

Environmental

Operation case temperature range: -40°C to +100°C

Storage temperature: -40°C to +125°C

Humidity: 5% to 100%

Safety

| | |
|------------|-------------|
| UL | UL1950 |
| CAN | CAN22.2-950 |
| TUV | EN60950 |

Electrical Specs

Input

| | |
|----------------------------------|---|
| Input range | 18-36 Vdc (24 Vdc nominal) 36 - 75Vdc (48Vdc nominal) |
| Input capacitance | 2mF typical |
| Input reverse voltage protection | Fuse recommended |
| Input surge voltage | 100V for 100ms (048L) 50V for 100ms (024L) 36V for 100ms (012L) |
| Input reflected ripple | <10mA (P-P) See Note 2 |
| Undervoltage lockout | Vin<32V (-048L ONLY) |
| Efficiency | 82% typical |

Output

| | |
|--------------------------|---|
| Voltage tolerance | Main Output ±1.0% Aux Output ±3.0% Dual Output ±2.0% |
| Line regulation | Main Output ±0.1% Aux Output ±0.5% Dual Output ±0.2% |
| Load regulation | Main Output ±0.75% Aux Output ±3.0% Dual Output ±0.5% (10% to 100% load) Note 6. |
| Noise/ripple | 50mV P-P, Singles 100mVp-p, Dual , Triple |
| Short circuit protection | Continuous power cycle |
| Overvoltage protection | 120% of VO, Typ |
| Transient response | 2% Vo typ; recovery <500msec typ (25% step load change to within 1%Vo) |
| Temperature coefficient | ±0.2%/°C |
| Switching frequency | 350kHz |

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) | <10ma |
| Output trim | Single output models |
| Thermal shutdown | 110°C Baseplate temperature (typ) Auto reset |

Isolation

| | |
|----------------------|---------------|
| I/O isolation | 1500Vdc |
| Isolation resistance | 15 x 108 ohms |

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



AA25N

Ordering Information

| Input VDC | Output 1 Voltage | Output 2 Voltage | Output 3 Voltage | Output Power | Model Number |
|-----------|------------------|------------------|------------------|--------------|--------------------|
| 18-36 | 12V @ 2.08A | | | 25W | AA25N-024L-120S |
| 18-36 | 15V @ 0.83A | -15V @ 0.83A | | 25W | AA25N-024L-150D |
| 36-75 | 3.3V @ 6A | | | 19.8W | AA25N-048L-033S |
| 36-75 | 5V @ 5A | | | 25W | AA25N-048L-050S |
| 36-75 | 5V @ 5A | 3.3V @ 6A | | 25W | AA25N-048L-050D033 |
| 36-75 | 5V @ 2.5A | 12V @ 0.52A | -12V @ 0.52A | 25W | AA25N-048L-050T120 |

Notes:

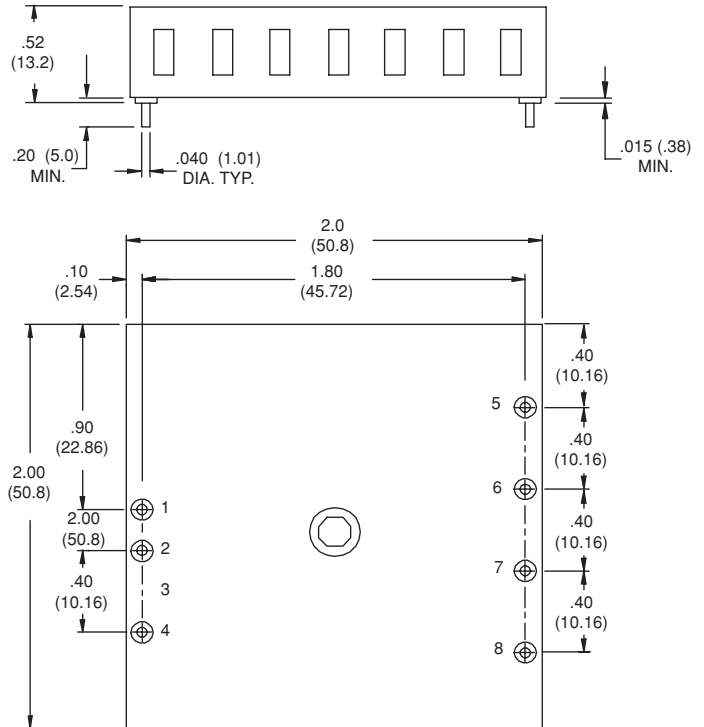
Max output power not to exceed 25W total. The sum of output currents not to exceed 6 Amps.
 Any output loading ratio within the maximum specified limits is possible.

Pin Assignments

| Single Output | Dual Output | Triple Output |
|---------------|-------------|---------------|
| 1. +Vin | 1. +Vin | 1. +Vin |
| 2. -Vin | 2. -Vin | 2. -Vin |
| 3. No Pin | 3. No Pin | 3. No Pin |
| 4. Enable | 4. Enable | 4. Enable |
| 5. No Pin | 5. V1 Out | 5. V2 Out |
| 6. V1 Out | 6. Comm | 6. V1 Out |
| 7. Comm | 7. V2 Out | 7. Comm |
| 8. Trim | 8. N/C | 8. V3 Out |

Notes:

- 20 MHz bandwidth. An external 2.2mf ceramic capacitor is recommended to be placed from +V out to -V out.
- 12V and 24V Input models require external capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
- All specifications are typical at nominal line, full load, and 25° C unless otherwise noted.
- All specifications subject to change without notice. Mechanical drawings are for reference only.
- Please refer to the Technical Reference Notes for more information.
- Balanced loads on dual and Aux output voltage.
- Warranty: 1 yr



Case material: Metal base/cover
 Weight: 2.5 Oz / 68Gr.

Astec Conventional Power