AA25N

25 Watts

AA25N Series

Total Power	*25 Watts*
Input Voltages	*12V, 24V, 48V*
# of Outputs	*Single, Dual, Triple*

"Includes 5V/ 3.3V Dual Output Model"
Load Sharing

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

Operating case temperature range: -40°C +100°C

Storage temperature: -40°C to +125°C

Humidity: 5% to 100%

SAFETY

UL	UL1950
CAN	CAN22.2-950
TUV	EN60950

AA25N-048L-033S Technical Manual - Click Here

AA25N-048L-050S Technical Manual - Click Here

AA25N-048L-120S Technical Manual - Click Here

ELECTRICAL SPECIFICATIONS

Input

Input range ..... 9-18Vdc (12Vdc nominal)
18-36 Vdc (24 Vdc nominal)
36 - 75Vdc (48Vdc nominal)
Input capacitance ..... 2µF 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 V_0, Typ
Transient response ..... 2% Vo typ; recovery <500µsec typ
(25% step load change to within 1%V_o)
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 compatable
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 10^8 ohms

NOTES

All specifications are typical at nominal line, full load and 25° C unless otherwise stated.
Specifications subject to change without notice.

USA: 1-888-41-ASTEC Europe (UK): +44(0)1384-842211 Asia (HK): 852-2437-9662

ASIA
6F., CDW Building
382-392 Castle Peak Road
Tsuen Wan, N.T., Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426

EUROPE
Astec House, Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX, UK
Telephone:+44(0)1384-842211
Facsimile:+44(0)1384-843355

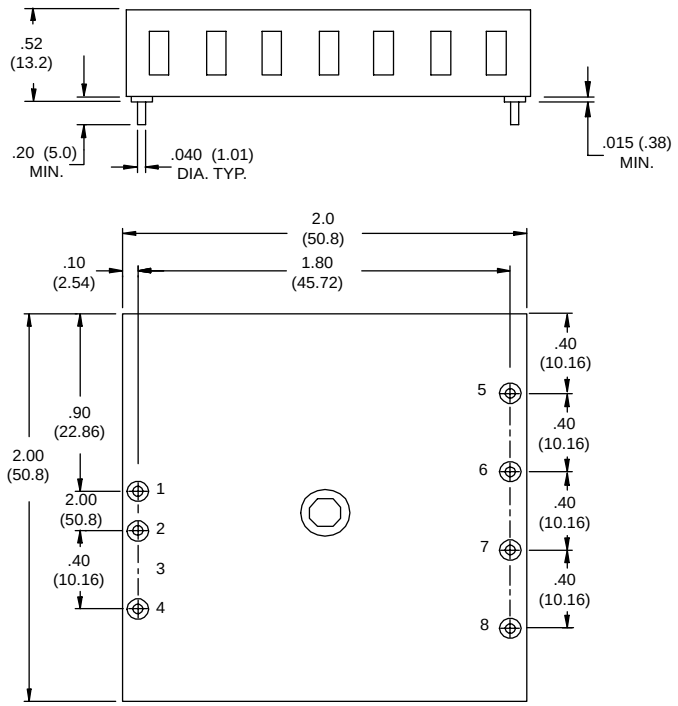
AMERICAS
5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

ORDERING INFORMATION

Input Vdc	Output 1 Voltage	Output 2 Voltage	Output 3 Voltage	Output Power	Model Number
9-18	5V @ 4.5A			22.5W	AA25N-012L-050S
9-18	5V @ 2.5A	-5V @ 2.25A		22.5W	AA25N-012L-050D
9-18	12V @ 1.04A	-12V @ 1.04A		25W	AA25N-012L-120D
9-18	15V @ 0.83A	-15V @ .83A		25W	AA25N-012L-150D
18-36	3.3V @ 6A			19.8W	AA25N-024L-033S
18-36	5V @ 5A			25W	AA25N-024L-050S
18-36	12V @ 2.08A			25W	AA25N-024L-120S
18-36	15V @ 1.67A			25W	AA25N-024L-150S
18-36	5V @ 2.5A	-5V @ 2.5A		25W	AA25N-024L-050D
18-36	12V @ 1.04A	-12V @ 1.04A		25W	AA25N-024L-120D
18-36	15V @ 0.83A	-15V @ 0.83A		25W	AA25N-024L-150D
18-36	5V @ 2.5A	12V @ .52A	-12V @ .52A	25W	AA25N-024L-050T120
18-36	5V @ 2.5A	15V @ .42A	-15V @ .42A	25W	AA25N-024L-050T150
36-75	3.3V @ 6A			19.8W	AA25N-048L-033S
36-75	5V @ 5A			25W	AA25N-048L-050S
36-75	12V @ 2.14A			25W	AA25N-048L-120S
36-75	15V @ 1.67A			25W	AA25N-048L-150S
36-75	5V @ 2.5A	-5V @ 2.5A		25W	AA25N-048L-050D
36-75	5V @ 5A	3.3V @ 6A		*25W	AA25N-048L-050D033 **(Note 7)**
36-75	12V @ 1.04A	-12V @ 1.04A		25W	AA25N-048L-120D
36-75	15V @ 0.83A	-15V @ 0.83A		25W	AA25N-048L-150D
36-75	5V @ 2.5A	12V @ 0.52A	-12V @ 0.52A	25W	AA25N-048L-050T120
36-75	3.3V @ 3A	12V @ 0.62A	-12V @ 0.62A	25W	AA25N-048L-033T120
36-75	3.3V @ 3A	15V @ 0.5A	-15V @ 0.5A	25W	AA25N-048L-033T150

* 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.

DIMENSIONS



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

1. 20 MHz bandwidth. An external 2.2µf ceramic capacitor is recommended to be placed from +V out to -V out.
2. 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.
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.
6. Balanced loads on dual and Aux output voltage.
7. **This model includes Trim feature and unique pin assignments. Contact factory.**

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