

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

ELECTRICAL SPECIFICATIONS

Input

Input range	9-18Vdc (12Vdc nominal)
	18-36 Vdc (24 Vdc nominal)
	36 - 75Vdc (48Vdc nominal)
Input capacitance	2 μ F typical
Input reverse voltage	Fuse recommended protection
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 $\pm 1.0\%$	Aux Output $\pm 3.0\%$	Dual Output $\pm 2.0\%$
Line regulation	Main Output $\pm 0.1\%$	Aux Output $\pm 0.5\%$	Dual Output $\pm 0.2\%$
Load regulation	Main Output $\pm 0.75\%$	Aux Output $\pm 3.0\%$	Dual Output $\pm 0.5\%$
		(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 _o , Typ		
Transient response	2% V _o typ; recovery <500 μ sec typ		
	(25% step load change to within 1%V _o)		
Temperature coefficient	$\pm 0.2\%/^{\circ}\text{C}$		
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 10 ⁸ ohms

NOTES

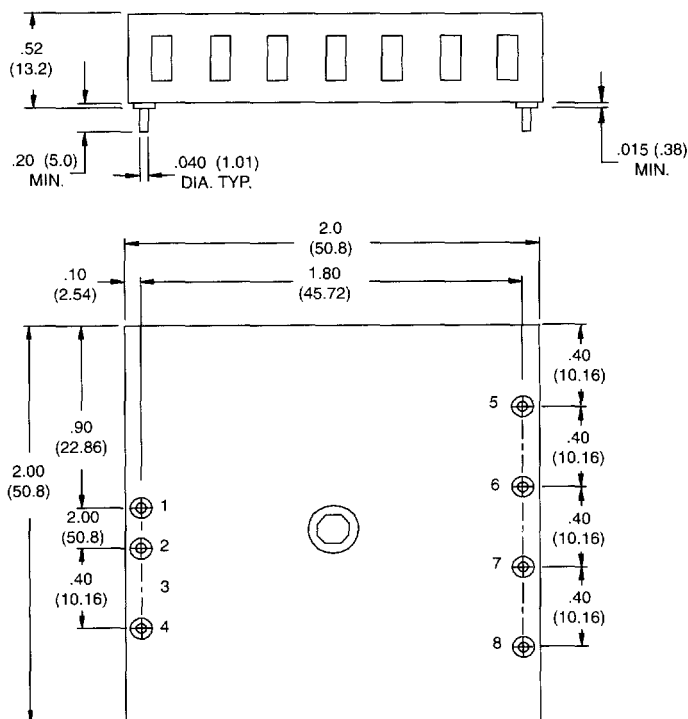
All specifications are typical at nominal line, full load and 25° C unless otherwise stated.
Specifications subject to change without notice.

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

- 20 MHz bandwidth. An external 2.2µf 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.
- This model includes Trim feature and unique pin assignments. Contact factory.

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