

AM3N-D Series

3 watt dc-dc converters

Picture
Available
Soon

- DUAL REGULATED OUTPUTS
- 24 PIN DIP PACKAGE
- LOW RIPPLE & NOISE
- HIGH EFFICIENCY UP TO 80%
- LOW PROFILE PACKAGING
- INPUT/OUTPUT ISOLATION: 1000, 3000 & 5200VDC
- 5200VDC ISOLATION, PLASTIC CASE
- OPERATING TEMPERATURE: -25°C ... +71°C
- CONTINUOUS SHORT CIRCUIT PROTECTION
- PIN-COMPATIBLE WITH MULTIPLE MANUFACTURERS

GENERAL DESCRIPTION

Our AM3N-D series is a family of cost effective 3W dual output DC/DC converters. These converters combines miniature package in a 24-pin DIP compatible case with high performance features such as 1000, 3000 & 5200VDC input/output isolation voltage, continuous short circuit protection with automatic restart and tight line/load

regulation. Seventy two models operate from input voltages of 5, 12 & 24VDC with producing output voltage levels of ± 3.3 , ± 5 , ± 7.2 , ± 9 , ± 12 , ± 15 , ± 18 & ± 24 VDC. Full SMD-design and a 100% production test of parameters ensures a high reliability in this product.

ELECTRICAL SPECIFICATIONS

Specifications typical at +25°C, nominal input voltage, rated output current unless otherwise specified

Input Specifications:

Voltage range	$\pm 10\%$
Filter	π (Pi) Network

Isolation Specifications:

Rated voltage	1000, 3000 or 5200VDC
Resistance	$> 1000\text{M}\Omega$
Capacitance	60pF, typ.

General Specifications:

Efficiency	66% to 80%
Switching Frequency	250kHz, typ. 100% load

Physical Specifications:

Dimensions	31.75x20.32x10.16 mm 1.25x0.8x0.4 inches
Weight	14.5 g
Case material	Nickel-Coated Copper
Case material @ 5200VDC	Plastic

Output Specifications:

Voltage accuracy	$\pm 2\%$, max.
Voltage balance	$\pm 1\%$
Ripple & noise (at 20MHz BW)	75mVp-p, max.
Short circuit protection	Continuous
Short circuit restart	Automatic
Line voltage regulation	$\pm 0.5\%$, max.
Load voltage regulation	$\pm 0.5\%$, max.
Temperature Coefficient	$\pm 0.02\%/^{\circ}\text{C}$, typ.

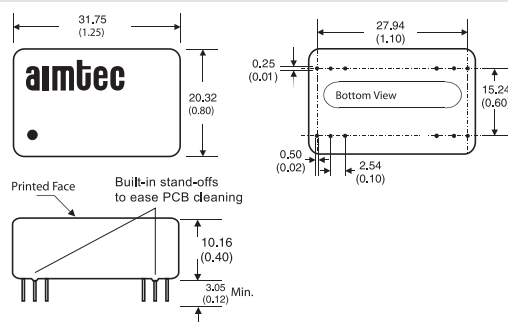
Environmental Specifications:

Operating temperature (ambient)	-25°C ... +71°C
Storage temperature	-40°C ... +125°C
Case Temperature	+90°C, max.
Derating	None required
Humidity (non-condensing)	Up to 90%
Cooling	Free-air Convection

MTBF: $> 1,000,000$ hrs (MIL-HDBK-217F, Ground Benign, $t=+25^{\circ}\text{C}$)

Specifications are subject to change without notification

OUTLINE DIMENSIONS & PIN CONNECTIONS



Pin	1000VDC	3000 & 5200VDC
1	+V Input	+V Input
2	-V Output	+V Input
3	Common.	Omitted
10	Common	Common
11	+V Output	Common
12	-V Input	Omitted
13	-V Input	-V Output
14	+V Output	Omitted
15	Common	+V Output
22	Common	Omitted
23	-V Output	-V Input
24	+V Input	-V Input

TO ORDER CALL 1-888-9-AIMTEC

AM3N-D Series

MODELS

Models			Input Voltage	Output Voltage	Output Current max.
Isolation 1000VDC	Isolation 3000VDC	Isolation 5200VDC			
AM3N-0503D-R	AM3N-0503DH30-R	AM3N-0503DH52-R	5V±10%	±3.3VDC	±400mA
AM3N-0505D-R	AM3N-0505DH30-R	AM3N-0505DH52-R		±5VDC	±300mA
AM3N-0507D-R	AM3N-0507DH30-R	AM3N-0507DH52-R		±7.2VDC	±208mA
AM3N-0509D-R	AM3N-0509DH30-R	AM3N-0509DH52-R		±9VDC	±167mA
AM3N-0512D-R	AM3N-0512DH30-R	AM3N-0512DH52-R		±12VDC	±125mA
AM3N-0515D-R	AM3N-0515DH30-R	AM3N-0515DH52-R		±15VDC	±100mA
AM3N-0518D-R	AM3N-0518DH30-R	AM3N-0518DH52-R		±18VDC	±84mA
AM3N-0524D-R	AM3N-0524DH30-R	AM3N-0524DH52-R		±24VDC	±63mA
AM3N-1203D-R	AM3N-1203DH30-R	AM3N-1203DH52-R	12V±10%	±3.3VDC	±400mA
AM3N-1205D-R	AM3N-1205DH30-R	AM3N-1205DH52-R		±5VDC	±300mA
AM3N-1207D-R	AM3N-1207DH30-R	AM3N-1207DH52-R		±7.2VDC	±208mA
AM3N-1209D-R	AM3N-1209DH30-R	AM3N-1209DH52-R		±9VDC	±167mA
AM3N-1212D-R	AM3N-1212DH30-R	AM3N-1212DH52-R		±12VDC	±125mA
AM3N-1215D-R	AM3N-1215DH30-R	AM3N-1215DH52-R		±15VDC	±100mA
AM3N-1218D-R	AM3N-1218DH30-R	AM3N-1218DH52-R		±18VDC	±84mA
AM3N-1224D-R	AM3N-1224DH30-R	AM3N-1224DH52-R		±24VDC	±63mA
AM3N-2403D-R	AM3N-2403DH30-R	AM3N-2403DH52-R	24V±10%	±3.3VDC	±400mA
AM3N-2405D-R	AM3N-2405DH30-R	AM3N-2405DH52-R		±5VDC	±300mA
AM3N-2407D-R	AM3N-2407DH30-R	AM3N-2407DH52-R		±7.2VDC	±208mA
AM3N-2409D-R	AM3N-2409DH30-R	AM3N-2409DH52-R		±9VDC	±167mA
AM3N-2412D-R	AM3N-2412DH30-R	AM3N-2412DH52-R		±12VDC	±125mA
AM3N-2415D-R	AM3N-2415DH30-R	AM3N-2415DH52-R		±15VDC	±100mA
AM3N-2418D-R	AM3N-2418DH30-R	AM3N-2418DH52-R		±18VDC	±84mA
AM3N-2424D-R	AM3N-2424DH30-R	AM3N-2424DH52-R		±24VDC	±63mA