

DAU-A2 SERIES

2W UNREGULATED

DANUBE

FEATURES

- TWO CHANNEL DC-DC CONVERTERS
- DUAL IN LINE PACKAGE
- UP TO 2W UNREGULATED OUTPUT POWER
- NO EXTERNAL COMPONENTS REQUIRED
- 100% BURNED IN
- HIGH EFFICIENCY
- UL 94-V0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 3 YEARS WARRANTY



OUTPUT SPECIFICATIONS

Voltage Set-point Accuracy	+/-3% max
Temperature Coefficient	+/-0.03%/°C
Ripple & Noise(20MHz BW)	100mVp-p max
Line Regulation ¹	+/-1.2% max
Load Regulation ²	+/-8% max
Minimum Load	10% of Full Load
Short Circuit Protection	Momentary
Short Circuit Restart	Automatic

INPUT SPECIFICATIONS

Input Voltage Range	+/-20% max
Input Filter	Pi Network
Protection	Fuse Recommended

GENERAL SPECIFICATIONS

Efficiency	79%-88%
Isolation Voltage ³	In to Out Out 1 to Out 2
	3000VDC min 1000VDC min
Isolation Resistance	10 ⁹ ohms min
Isolation Capacitance	80pF max
Leakage Current	Viso=240VAC 10µA(max)
Switching Frequency	50 KHz min
MTTF ⁴	>850,000 Hours
Weight	16g Typ
Case Material	Six-Side Shielded Case
Case Size	28.58mm*28.58mm*10.16mm
Potting Material	Epoxy(UL94-V0)
Conducted Emissions	EN55022 Class A
Radiated Emissions	EN55022 Class A

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C to +85°C
Case Temperature	+100°C max
Storage Temperature	-55°C to +100°C
Humidity	95% max
Cooling	Free-Air Convection

ALL SPECIFICATIONS TYPICAL AT NOMINAL LINE, FULL LOAD, AND 25°C UNLESS OTHERWISE NOTED.

¹ Line Regulation is for a 1.0% change in input Voltage.

² Load Regulation is for output load current change from 10% to 100%.

³ 1000VDC for 10 seconds, 3000VDC for 3 seconds.

⁴ MIL-HDBK-217F @25°C, Ground Benign.

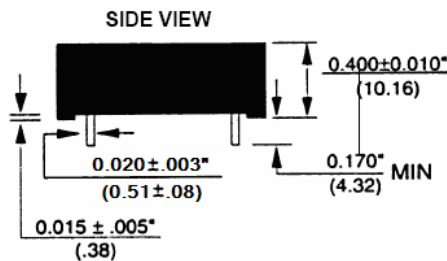
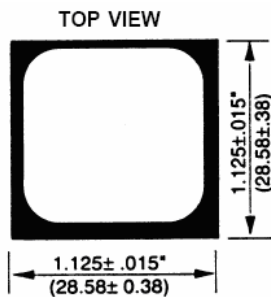
● SELECTION GUIDE 2W OUTPUT

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)		OUTPUT CURRENT (mA)		INPUT ⁵ CURRENT(mA)		EFF (%) ⁶	PACKAGE / ISOLATION(VDC)
		OUT1	OUT2	OUT1	OUT2	FULL LOAD	NO LOAD		
DAUD-051515A2	5	+/-15	+/-15	+/-34	+/-34	506	40	79%	A / 3000V
DAUD-121212A2	12	+/-12	+/-12	+/-42	+/-42	210	15	79%	A / 3000V
DAUD-121515A2	12	+/-15	+/-15	+/-34	+/-34	206	15	81%	A / 3000V
DAUD-151212A2	15	+/-12	+/-12	+/-42	+/-42	166	15	80%	A / 3000V
DAUD-151515A2	15	+/-15	+/-15	+/-34	+/-34	166	15	80%	A / 3000V
DAUD-241212A2	24	+/-12	+/-12	+/-42	+/-42	104	10	80%	A / 3000V
DAUD-241515A2	24	+/-15	+/-15	+/-34	+/-34	104	10	80%	A / 3000V

Note: Other input to output voltages may be available. Please contact factory.

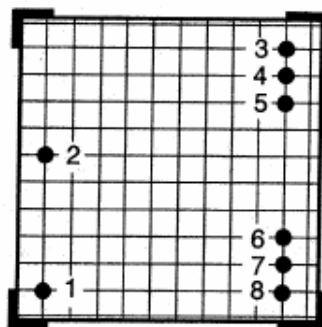
● MECHANICAL DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS

PACKAGE "A"



PIN	DUAL
1	+Vin
2	-Vin
3	+Vout 1,
4,	Common 1
5	-Vout 1
6	-Vout 2
7	Common 2
8	+Vout 2

BOTTOM VIEW



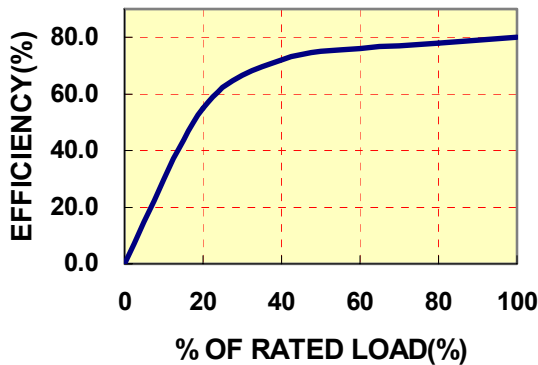
⁵ NOMINAL INPUT VOLTAGE.

⁶ NOMINAL INPUT VOLTAGE, FULL LOAD.

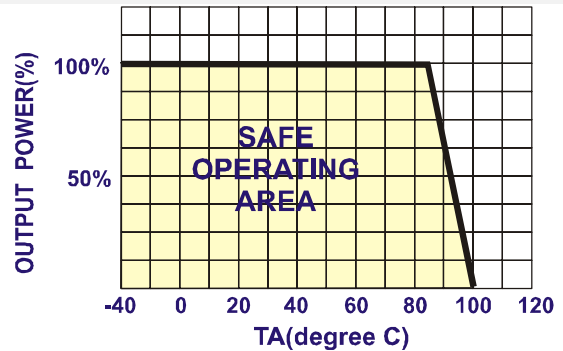
● TYPICAL PERFORMANCE CURVES

Specifications typical at $t_a=25^\circ\text{C}$, nominal input voltage , rated output current unless otherwise specified.

EFFICIENCY VS LOAD



DERATING CURVES



● INPUT FUSE SELECTION GUIDE

5V	12V	15V	24V
INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)
1500mA Slow-Blow Type	750mA Slow-Blow Type	500mA Slow-Blow Type	300mA Slow-Blow Type

Note: Certain applications may require the installation of external fuse in front of the input.

DAU-A2 SERIES APPLICATION NOTES:

EXTERNAL CAPACITANCE REQUIREMENTS:

No external capacitance is required for operation of the DAU-A2 series.

To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 100KHz is required.

External output capacitance is not required for operation, however it is recommended that 10uF tantalum and 0.1uF ceramic capacitance be selected for reduced system noise.

Additional output capacitance may be added for increased filtering, but should not exceed 220uF.

We Can Offer EMC-Filter According To EN55011/22 Class B.

Negative Outputs:

A negative output voltage may be obtained by connecting the +OUT to circuit ground and connecting -OUT as the negative output.

FOR MORE INFORMATION CALL:

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Home Page

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