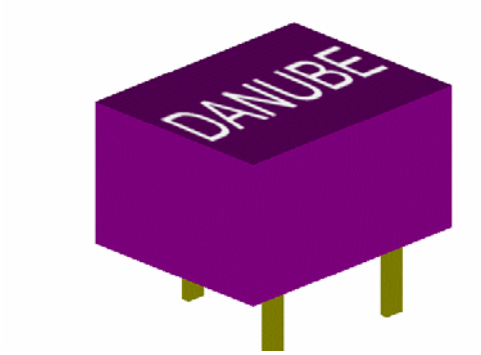
DC-DC Converter UNIT

MAU Series (1 W UNREGULATED DC-DC CONVERTER)

FEATURES

- 1000VDC ISOLATION
- EFFICIENCY UP TO 82%
- INTERNAL SMD TECHNOLOGY
- LOW COST
- NO HEATSINK REQUIRED
- UP TO 1W UNREGULATED OUTPUT POWER
- DUAL IN LINE PACKAGE
- 100% BURNED IN
- MTBF > 2,000,000 HOURS



OUTPUT SPECIFICATIONS

Voltage Setpoint Accuracy	+/-2% max
Temperature Coefficient	+/-0.03%/ °C
Ripple & Noise (20MHz BW)	100mVp-p max
Line Regulation[1]	+/-1.2% max
Load Regulation[2]	+/-8% max
Short Circuit Protection	Momentary

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25 °C to +71 °C
Storage Temperature	-55 °C to +125 °C
Cooling	Free-Air Convection

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

INPUT SPECIFICATIONS

Input Voltage Range	+/-10% max
Input Filter	Capacitor Type

GENERAL SPECIFICATIONS

Efficiency	70%-82%
Isolation Voltage[3]	1000 VDC min
Isolation Resistance	10^9 ohms min
Switching Frequency	100 KHz min
Isolation Capacitance	80pF max
MTBF	2,000,000 Hours
Weight	1.7g Typ
Case Material	Non-Conductive Plastic
Case Size	12.7mm*10.16mm*6.87mm

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

[2] *Load Regulation is for output load current change from 20% to 100%.*

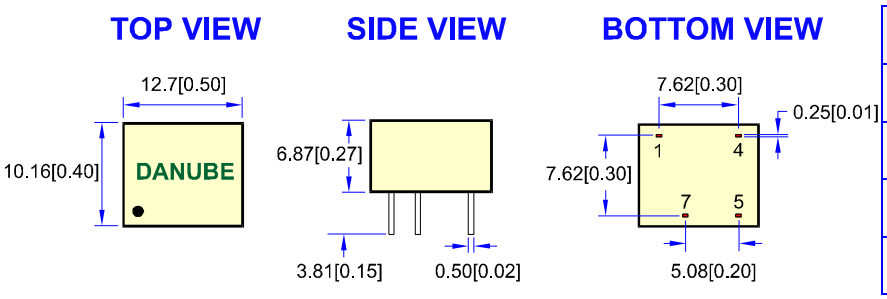
[3] *For 60 seconds*

SELECTION GUIDE
1W OUTPUT

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT CURRENT(mA)		EFF (%)	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
MAUS-0505	5	5	200	260	26	77	1000
MAUS-0509	5	9	110	260	27	77	1000
MAUS-0512	5	12	84	253	26	79	1000
MAUS-0515	5	15	67	253	28	79	1000
MAUS-1205	12	5	200	107	11	78	1000
MAUS-1209	12	9	110	105	11	79	1000
MAUS-1212	12	12	84	102	11	82	1000
MAUS-1215	12	15	67	102	12	82	1000
MAUS-2405	24	5	200	54	8	77	1000
MAUS-2409	24	9	110	54	8	77	1000
MAUS-2412	24	12	84	54	8	77	1000
MAUS-2415	24	15	67	52	7	80	1000
MAUS-4805	48	5	200	27	4	76	1000
MAUS-4809	48	9	110	27	4	77	1000
MAUS-4812	48	12	84	27	4	77	1000
MAUS-4815	48	15	67	26	4	79	1000

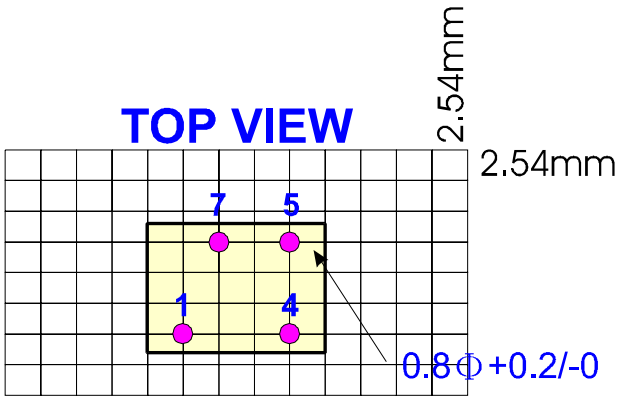
Note: Other input to output voltages may be available. Please contact factory.

MECHANICAL DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS

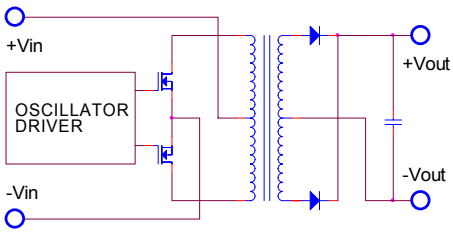


PIN	SINGLE
1	-Vin
4	+Vin
5	+Vout
7	-Vout

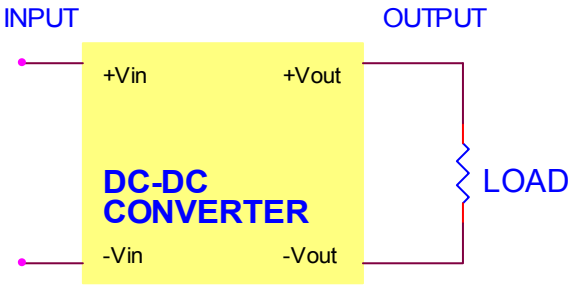
All dimensions are in mm[inches]



SIMPLIFIED SCHEMATIC



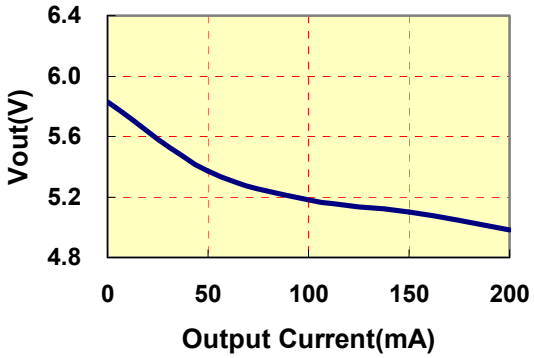
TYPICAL APPLICATIONS



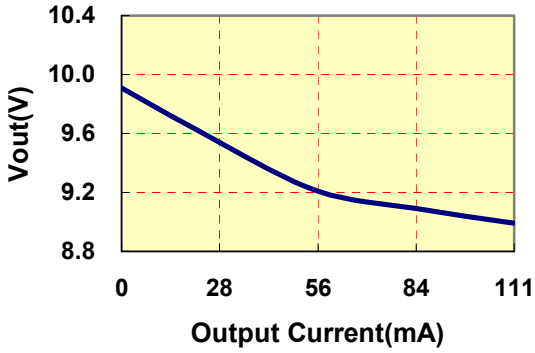
● TYPICAL PERFORMANCE CUREVES

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

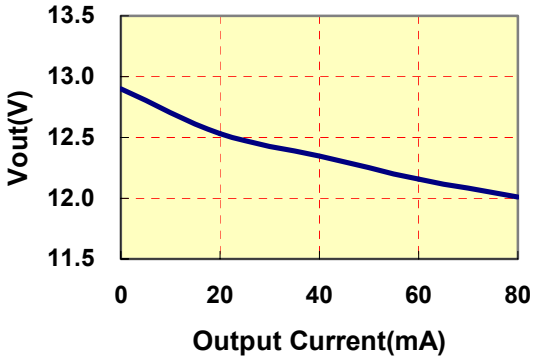
VOUT VS LOAD(5Vout Models)



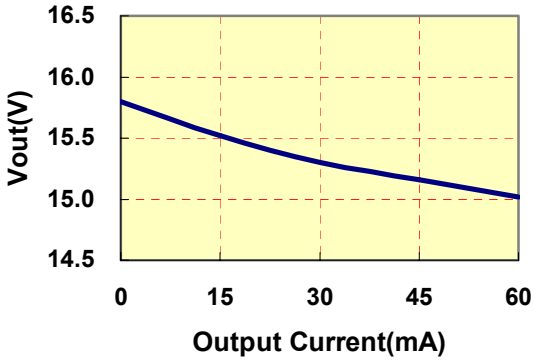
VOUT VS LOAD(9Vout Models)



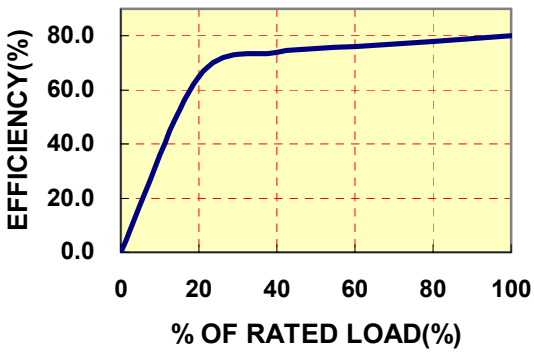
VOUT VS LOAD(12Vout Models)



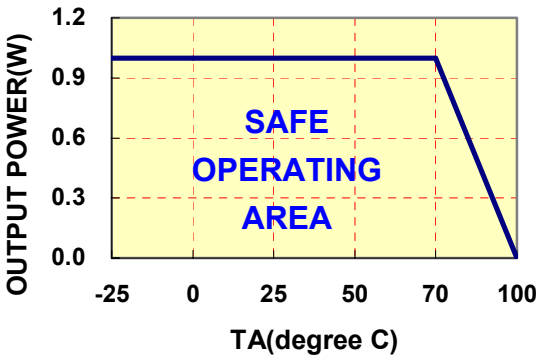
VOUT VS LOAD(15Vout Models)



EFFICIENCY VS LOAD



DERATING CURVE



MAU SERIES APPLICATION NOTES:

EXTERNAL CAPACITANCE REQUIREMENTS:

Output filtering is required for operation. A minimum of 10uF is needed. Output capacitance may be increased for additional filtering, not to exceed 220uF.

To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 250KHz is required.

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:

Power Systems – The Power Solution

Ilsfeld-Auenstein (Germany) Dörnet 8 Tel: + 49 / 70 62 / 67 59 – 6 Fax: + 49 / 70 62 / 67 59 -80

E-mail: Info@Power-Systems.de Home Page: www.Power-Systems.de