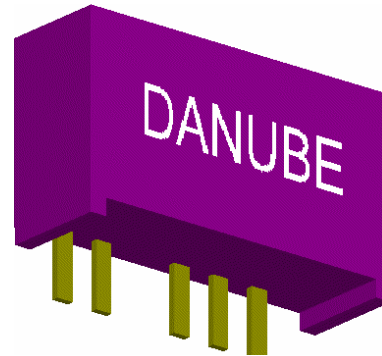


DC-DC Converter UNIT

PU-2W Series (2 W UNREGULATED DC-DC CONVERTER)

FEATURES

- 1000VDC ISOLATION
- EFFICIENCY UP TO 85%
- INTERNAL SMD TECHNOLOGY
- LOW COST
- NO HEATSINK REQUIRED
- UP TO 2W UNREGULATED OUTPUT POWER
- SINGLE IN LINE PACKAGE
- 100% BURNED IN
- MTBF > 1,800,000 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

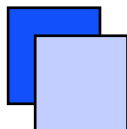
● GENERAL SPECIFICATIONS

Efficiency	70%-85%
Isolation Voltage ³	1000 VDC min
Isolation Resistance	10 ⁹ ohms min
Switching Frequency	100 KHz min
Isolation Capacitance	80pF max
MTBF	1,800,000 Hours
Weight	2.3g Typ
Case Material	Non-Conductive Plastic
Case Size	19.6mm*7.1mm*10.2mm

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



DC-DC Converter UNIT

PU-2W Series (2 W UNREGULATED DC-DC CONVERTER)

● SELECTION GUIDE 2W OUTPUT

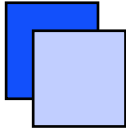
MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT CURRENT(mA)		EFF (%)	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
PUS-0503.3-2W	5	3.3	500	452	40	73	1000
PUS-0505-2W	5	5	400	520	40	77	1000
PUS-0509-2W	5	9	222	506	40	79	1000
PUS-0512-2W	5	12	167	500	40	80	1000
PUS-0515-2W	5	15	133	488	40	82	1000
PUD-0505-2W	5	+/-5	+/-200	520	40	77	1000
PUD-0512-2W	5	+/-12	+/-84	500	40	80	1000
PUD-0515-2W	5	+/-15	+/-67	488	40	82	1000
PUS-1203.3-2W	12	3.3	500	185	15	74	1000
PUS-1205-2W	12	5	400	214	15	78	1000
PUS-1209-2W	12	9	222	214	15	78	1000
PUS-1212-2W	12	12	167	200	15	83	1000
PUS-1215-2W	12	15	133	196	15	85	1000
PUD-1205-2W	12	+/-5	+/-200	214	15	78	1000
PUD-1212-2W	12	+/-12	+/-84	200	15	83	1000
PUD-1215-2W	12	+/-15	+/-67	196	15	85	1000
PUS-2403.3-2W	24	3.3	500	92	10	74	1000
PUS-2405-2W	24	5	400	107	10	78	1000
PUS-2409-2W	24	9	222	107	10	78	1000
PUS-2412-2W	24	12	167	103	10	81	1000
PUS-2415-2W	24	15	133	101	10	83	1000
PUD-2405-2W	24	+/-5	+/-200	107	10	78	1000
PUD-2412-2W	24	+/-12	+/-84	103	10	81	1000
PUD-2415-2W	24	+/-15	+/-67	101	10	83	1000

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

ORDERING INFORMATION:

FOR EXAMPLE: PUS-****-2W(2W SINGLE OUTPUT)

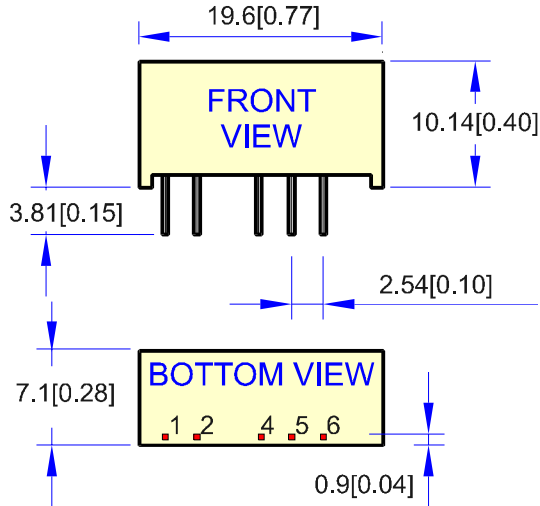
PUD-****-2W(2W DUAL OUTPUT)



DC-DC Converter UNIT

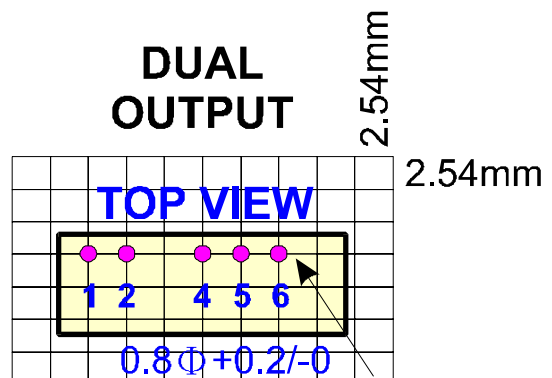
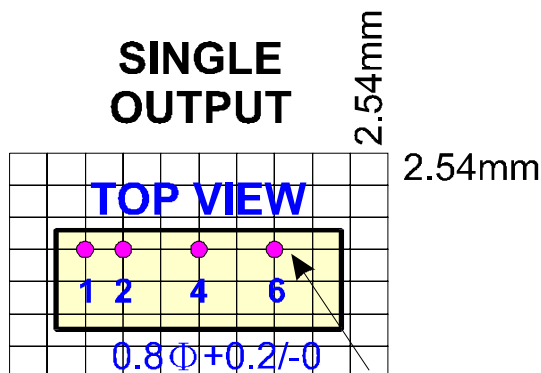
PU-2W Series (2 W UNREGULATED DC-DC CONVERTER)

MECHANICAL DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



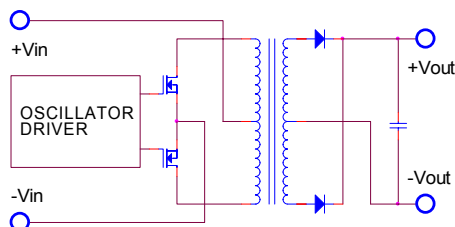
PIN	SINGLE	DUAL
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	NP	COMMON
6	+Vout	+Vout

All dimensions are in mm[inches]

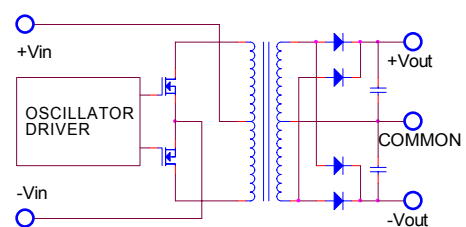


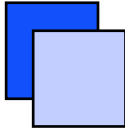
SIMPLIFIED SCHEMATIC

SINGLE OUTPUT



DUAL OUTPUT



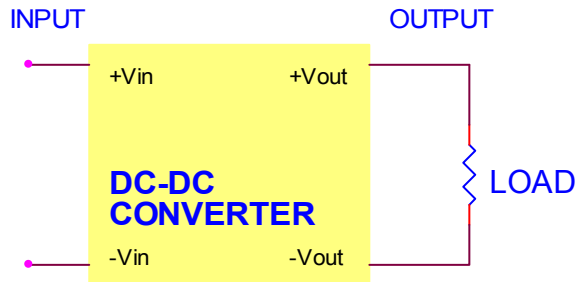


DC-DC Converter UNIT

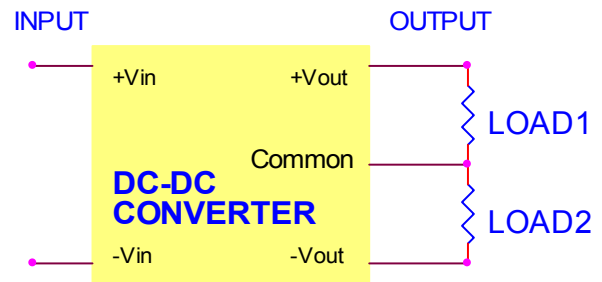
PU-2W Series (2 W UNREGULATED DC-DC CONVERTER)

TYPICAL APPLICATIONS

SINGLE OUTPUT



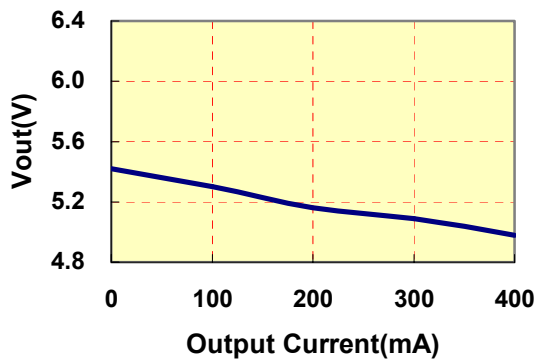
DUAL OUTPUT



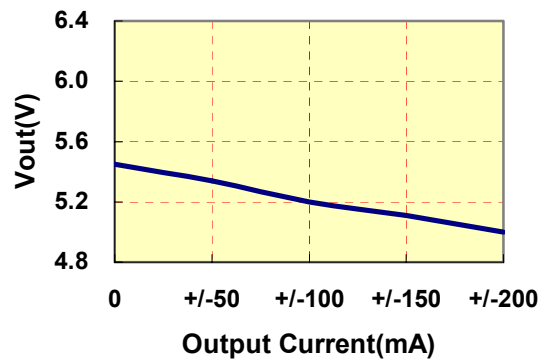
TYPICAL PERFORMANCE CURVES

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

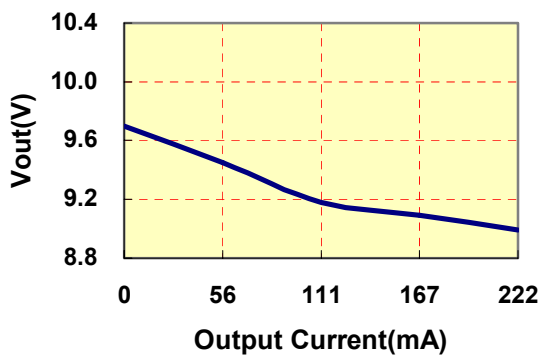
VOUT VS LOAD(5Vout Models)

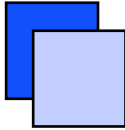


VOUT VS LOAD(+/- 5Vout Models)



VOUT VS LOAD(9Vout Models)

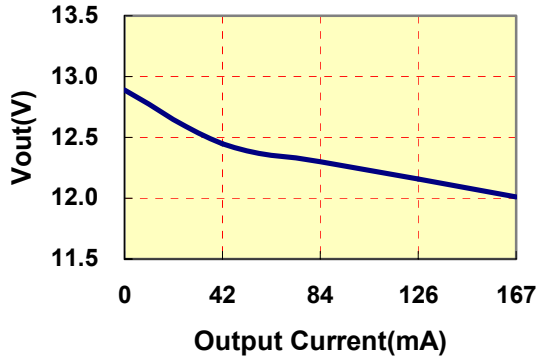




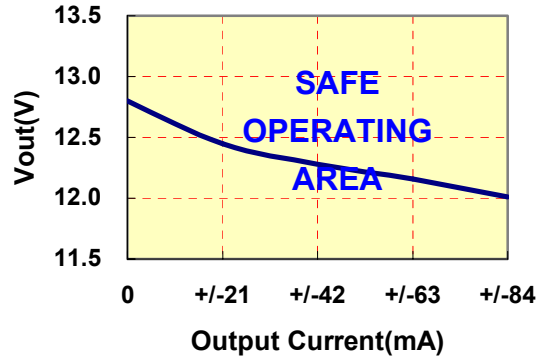
DC-DC Converter UNIT

PU-2W Series (2 W UNREGULATED DC-DC CONVERTER)

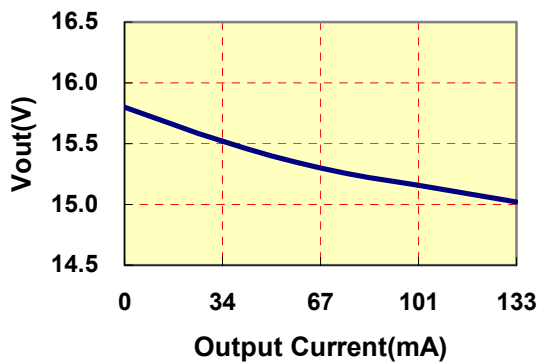
VOUT VS LOAD(12Vout Models)



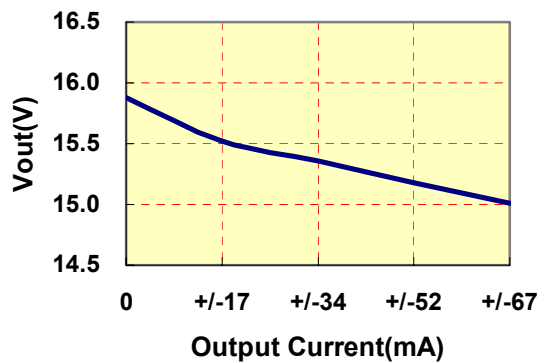
VOUT VS LOAD(+/- 12Vout Models)



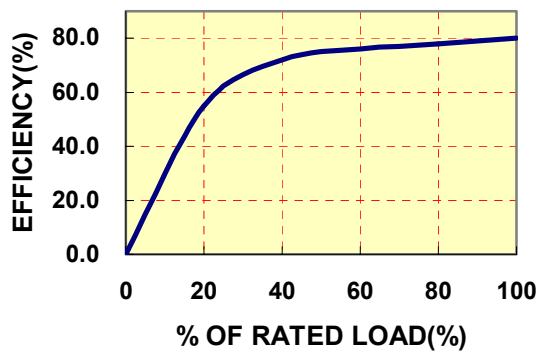
VOUT VS LOAD(15Vout Models)



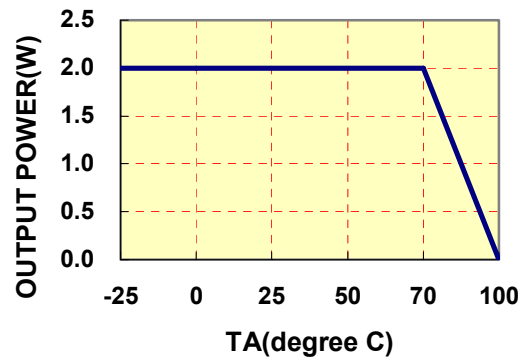
VOUT VS LOAD(+/- 15Vout Models)

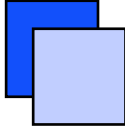


EFFICIENCY VS LOAD



DERATING CURVE





DC-DC Converter UNIT

PU-2W Series (2 W UNREGULATED DC-DC CONVERTER)

PU-2W 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 0.5ohm 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:

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Fax: + 49 / 70 62 / 67 59 -80

E-mail: Info@Power-Systems.de

Home Page: www.Power-Systems.de
