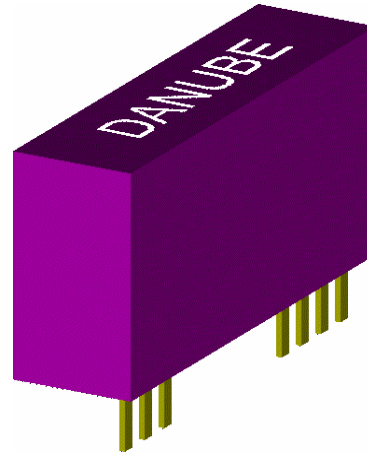


DC-DC Converter UNIT

1W Series (1W WIDE INPUT RANGE DC-DC CONVERTER)

FEATURES

- 1000VDC ISOLATION
- HIGH EFFICIENCY
- INTERNAL FILTERING
- LOW COST
- NO EXTERNAL COMPONENTS REQUIRED
- UP TO 2W REGULATED OUTPUT POWER
- SINGLE IN LINE PACKAGE
- 100% BURNED IN
- LOW NOISE
- MTBF > 1,000,000 HOURS



● OUTPUT SPECIFICATIONS

Voltage Setpoint Accuracy	+/-2% max
Temperature Coefficient	+/-0.03%/°C
Ripple & Noise (20MHz BW)	100mVp-p max
Line Regulation ¹	+/-0.2% max
Load Regulation ²	+/-0.2% max
Short Circuit Protection	Continuous

● 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	2:1 INPUT RANGE
Input Filter	Pi Network

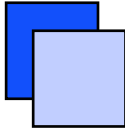
● GENERAL SPECIFICATIONS

Efficiency	70% min
Isolation Voltage ³	1000 VDC min
Isolation Resistance	10 ⁹ ohms min
Switching Frequency	75 KHz min
Isolation Capacitance	80pF max
MTBF	1,000,000 Hours
Weight	6.6g Typ
Case Material	Non-Conductive Plastic
Case Size	31.8mm*8.6mm*14.5mm

¹ High Line to Low Line.

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

³ For 60 seconds



DC-DC Converter UNIT

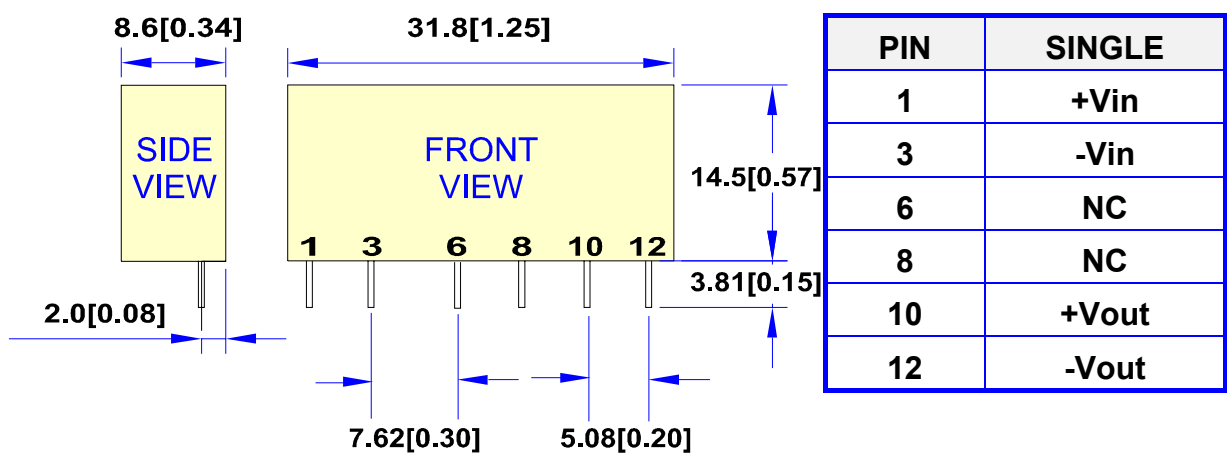
1W Series (1W WIDE INPUT RANGE DC-DC CONVERTER)

● SELECTION GUIDE 2W OUTPUT

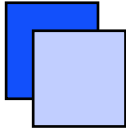
MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT CURRENT(mA)		EFF (%)	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
				1WS-1205	9-18		
1WS-1209	9-18	9	222	225	20	74	1000
1WS-1212	9-18	12	168	213	20	78	1000
1WS-1215	9-18	15	133	213	20	78	1000
1WS-2405	18-36	5	400	112	12	74	1000
1WS-2409	18-36	9	222	111	13	75	1000
1WS-2412	18-36	12	168	107	11	78	1000
1WS-2415	18-36	15	133	107	11	78	1000

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

● MECHANICAL DIMENSIONS



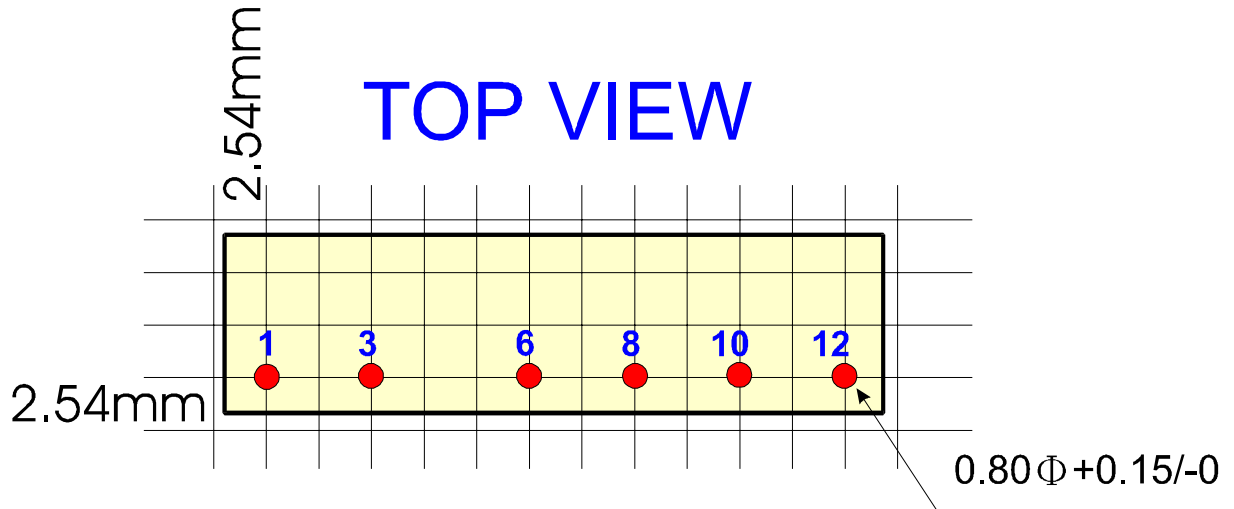
All dimensions are in millimeters[inches]



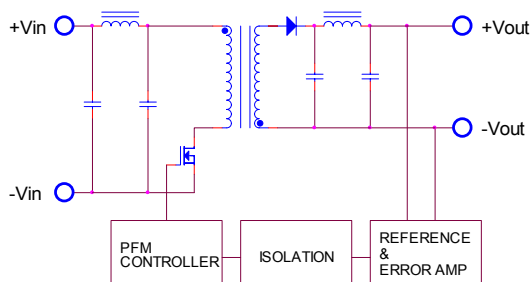
DC-DC Converter UNIT

1W Series (1W WIDE INPUT RANGE DC-DC CONVERTER)

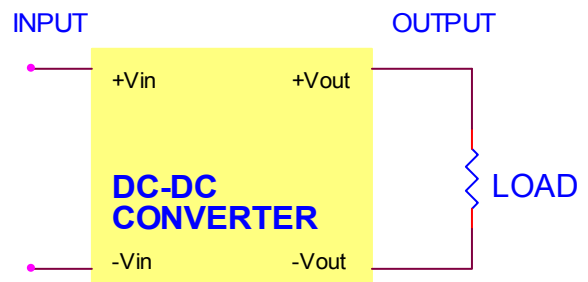
● RECOMMENDED FOOTPRINT DETAILS



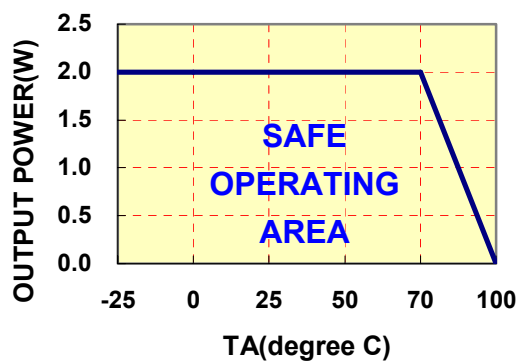
● SIMPLIFIED SCHEMATIC

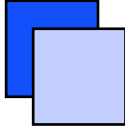


● TYPICAL APPLICATIONS



● TEMPERATURE DERATING





DC-DC Converter UNIT

1W Series (1W WIDE INPUT RANGE DC-DC CONVERTER)

1W SERIES APPLICATION NOTES:

EXTERNAL CAPACITANCE REQUIREMENTS:

No external capacitance is required for operation of the 1W 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.

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

74360 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
