PDW SERIES

9W WIDE INPUT RANGE

DANUBE

FEATURES

- LEAD FREE
- 1500VDC ISOLATION
- SINGLE IN LINE PACKAGE
- UP TO 9W REGULATED OUTPUT POWER
- NO EXTERNAL COMPONENTS REQUIRED
- INTERNAL FILTERING
- 100% BURN IN
- HIGH EFFICIENCY
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- ROHS COMPLIANT
- 3 YEARS WARRANTY



OUTPUT SPECIFICATIONS

Voltage Set-point Accuracy	+/-2% max.
Temperature Coefficient	+/-0.05%/°C
Ripple & Noise(20MHz BW)[1]	150mVp-p max.
Line Regulation[2]	+/-0.5% max.
Load Regulation[3]	+/-0.5% max.
Minimum Load	10% of Full Load
Short Circuit Protection	Continuous
Short Circuit Restart	Automatic
Over Load Protection	150% typ.
Transient Response[4]	500uS max.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	Output=5V	-40°C to 55°C
	Output=12V&15V	-40°C to 60°C
Case Temperature		+110°C max.
Storage Temperature		-55°C to +125°C
Humidity		95% max.
Cooling		Free-Air Convection

INPUT SPECIFICATIONS

Input Voltage Range	2:1 Input Range
Input Filter	Capacitor Type
Protection	Fuse Recommended
Start up Time(Nominal Input)	10mS max.
Remote ON/OFF Control	Table 1

GENERAL SPECIFICATIONS

Efficiency	85% min.
Isolation Voltage[5]	1500VDC min.
Isolation Resistance	10^9 ohms min.
Isolation Capacitance	80pF max.
Switching Frequency	400 KHz typ.
MTBF[6]	>270,000 Hours
Weight	5.0g typ.
Case Material	Non-Conductive Plastic
Case Size	24.0mm*9.6mm*11.2mm
Potting Material	Epoxy(UL94V-0)
Radiated Emissions	EN55032 Class A (with external filter)

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

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[1] *Measured with 1uF ceramic capacitor connects to the output pins.*
[2] *High Line to Low Line.*
[3] *Load Regulation is for output load current change from 10% to 100%.*
[4] *25% Step Load Change.*
[5] *1500VDC for 10 seconds.*
[6] *MIL-HDBK-217F @25°C , Ground Benign.*

● SELECTION GUIDE
2:1 8-9W OUTPUT

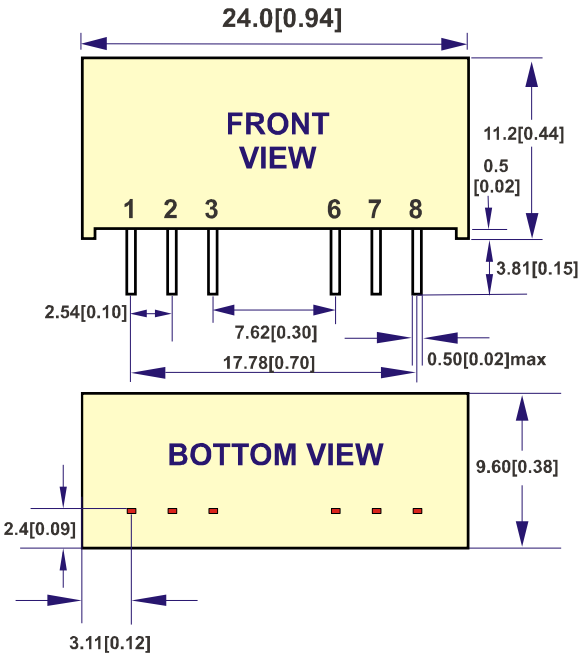
Specifications typical at ta=25°C,nominal input voltage , rated output current unless otherwise specified.

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT[7] CURRENT(mA)		EFF (%)[8]	ISOLATION[9] (VDC)	Capacitive Load Max
				FULL LOAD	NO LOAD			
PDWS-1205	9-18	5	1600	784	80	85	1500	1000uF
PDWS-1212	9-18	12	750	852	80	88	1500	220uF
PDWS-1215	9-18	15	600	852	80	88	1500	100uF
PDWS-2405	18-36	5	1600	392	40	85	1500	1000uF
PDWS-2412	18-36	12	750	426	40	88	1500	220uF
PDWS-2415	18-36	15	600	421	40	89	1500	100uF
PDWS-4805	36-75	5	1600	196	20	85	1500	1000uF
PDWS-4812	36-75	12	750	213	20	88	1500	220uF
PDWS-4815	36-75	15	600	211	20	89	1500	100uF

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

[7] *NOMINAL INPUT VOLTAGE.*
[8] *NOMINAL INPUT VOLTAGE, FULL LOAD.*
[9] *1500VDC for 10 seconds.*

MECHANICAL DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



All dimensions are in mm[inches]

PIN	SINGLE
1	-Vin
2	+Vin
3	Remote On/Off
6	+Vout
7	-Vout
8	NC

NOTE : All dimensions are in mm[inches]

1. Pin Size is 0.50x0.30mm[0.02x0.01"]
2. Pin is Tolerance .XX= ±0.05mm
3. Tolerance .X or .XX= ±0.5mm

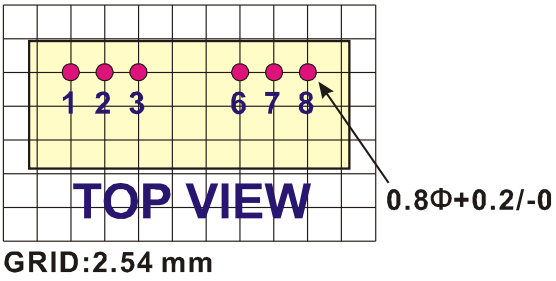
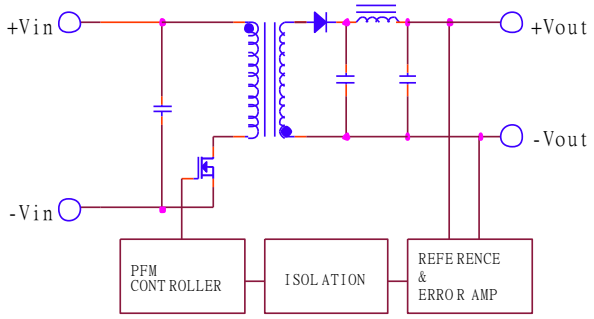


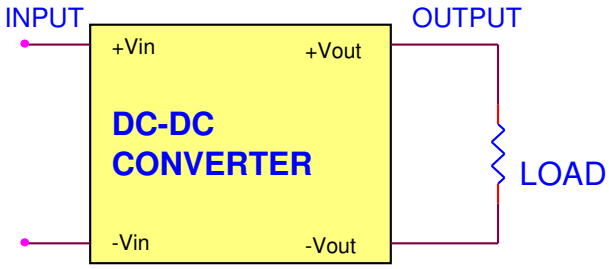
Table1 (Remote On/Off Control)

Remote On/Off Control			
Control Input	PIN3	Control Common	PIN1
Control Voltage		Converter Shutdown Idle Current	10mA
ON	>+2.5VDC or Open Circuit	Logic Compatibility	CMOS or Open Collector TTL
OFF	<+0.8VDC or Jumper to PIN1		

● SIMPLIFIED SCHEMATIC



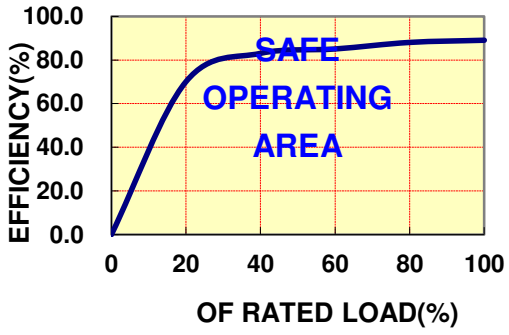
● TYPICAL APPLICATIONS



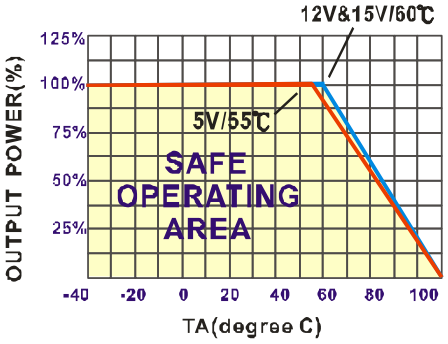
● TYPICAL PERFORMANCE CURVES

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

OUTPUT LOAD VS EFFICIENCY

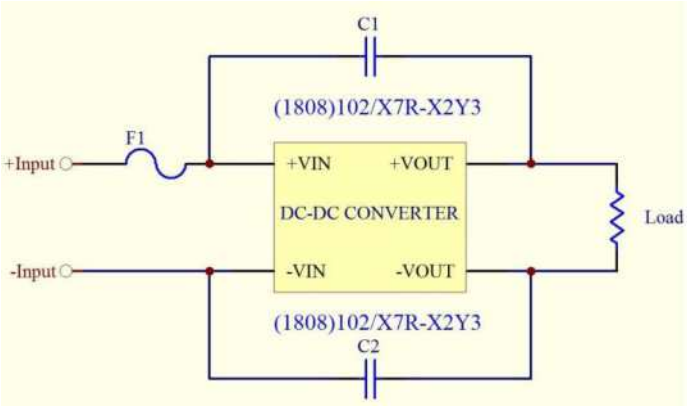


TEMPERATURE DERATING



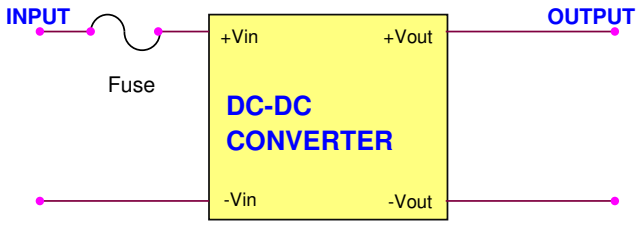
● RECOMMENDED FILTER FOR EN55032 CLASS A

The components used in the under figure, together with the manufacturer's part numbers for these components, are as follows:



● INPUT FUSE SELECTION GUIDE

9-18V INPUT VOLTAGE(VDC)	18-36V INPUT VOLTAGE(VDC)	36-75V INPUT VOLTAGE(VDC)
2000mA Slow-Blow Type	1000mA Slow-Blow Type	600mA Slow-Blow Type



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

PDW SERIES APPLICATION NOTES:

EXTERNAL CAPACITANCE REQUIREMENTS:

No external capacitance is required for operation of the PDW 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.

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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