

- **RATED 2-5W OUTPUT**
- **HIGH POWER DENSITY**
- **SINGLE&DUAL OUTPUT**
- **INDUSTRIAL STANDARD PIN-OUT**
- **NO HEAT SINK REQUIRED**
- **1000VDC/1500VDC ISOLATION**
- **WIDE INPUT RANGE: 2: 1, REGULATED OUTPUT**
- **PCB MOUNTING TYPE, DIP PACKAGE**
- **OVER CURRENT AND SHORT-CIRCUIT PROTECTION**



ELECTRICAL SPECIFICATIONS

All specifications tested typically @ 25°C, humidity<75%, nominal input and rated output unless otherwise noted.

OUTPUT SPECIFICATIONS				
Items:	Testing condition	Min	Typ	Max
Output accuracy:	At full load and nominal Vin			±2%
Line regulation:	Input voltage from low to high			0.5%
Load regulation:	From 10% to full load	Single Vout		0.5%
		Dual Vout		2%
Ripple and noise:	20MHz bandwidth	Vo≤5V, Vp-pmax≤50mV, Vo≥48V, Vp-pmax≤200mV Others: Vp-pmax≤100mVp-p		
Temperature drift				0.03 %/°C
Switching frequency			400KHz	
Over current protection point		110%		

INPUT SPECIFICATIONS				
Items:	Testing condition	Min	Typ	Max
Input voltage range	5VDC		4.5-9VDC	
	12VDC		9-18VDC	
	24VDC		18-36VDC	
	48VDC		36-72VDC	
	110VDC		85~125VDC	

COMMON SPECIFICATIONS				
Items		Min	Typ.	Max
Operating temperature range		-40°C		+85°C
Storage temperature range		-55°C		+125°C
Humidity				<75%
Cooling	Free Air Convection			
Isolation voltage (VDC)	Input to Output		500	1000
Isolation resistance (ohms)			10 ⁹	
Isolation capacitance (pF)				30
Efficiency (%)	See Product List	70		80
Case material	Non-conductive black copper			
Potting material	Epoxy Resin UL94-V0			
Packing material	Tube			

Dimension (mm / inch)	25.40*25.40*10.14 (1.00*1.00*0.40)		
Weight (g)	14		
MTBF (Hrs)		10 ⁶	

PRODUCT LIST

Part Number	Input Voltage (VDC)		Output		Efficiency (%, Typ.)	Package	
	Range	Nominal	Current (mA)	Voltage (VDC)			
DW5-12S05	9~18	12	1000	5	75	DIP	Single Output
DW5-12S12		12	417	12	80	DIP	Single Output
DW5-12S15		12	333	15	80	DIP	Single Output
DW5-12D05		12	±500	±5	75	DIP	Dual Output
DW5-12D12		12	±208	±12	80	DIP	Dual Output
DW5-12D15		12	±167	±15	80	DIP	Dual Output
DW5-24S05	18-36	24	1000	5	75	DIP	Single Output
DW5-24S12		24	417	12	80	DIP	Single Output
DW5-24S15		24	333	15	80	DIP	Single Output
DW5-24D05		24	±500	±5	75	DIP	Dual Output
DW5-24D12		24	±208	±12	80	DIP	Dual Output
DW5-24D15		24	±167	±15	80	DIP	Dual Output
DW5-48S05	36-72	48	1000	5	78	DIP	Single Output
DW5-48S12		48	417	12	80	DIP	Single Output
DW5-48S15		48	333	15	80	DIP	Single Output
DW5-48D24		48	±100	±24	80	DIP	Dual Output
DW5-48D05		48	±500	±5	75	DIP	Dual Output
DW5-48D12		48	±208	±12	80	DIP	Dual Output
DW5-48D15	48	±167	±15	80	DIP	Dual Output	

Note: For DW5-xxD/Sxx Series DC-DC, the isolation voltage is 1500VDC.

PRODUCT LIST

Part Number	Input Voltage (VDC)		Output		Efficiency (%, Typ.)	Package	
	Range	Nominal	Current (mA)	Voltage (VDC)			
DW2-12S05	9~18	12	400	5	75	DIP	Single Output
DW2-12S12		12	167	12	80	DIP	Single Output
DW2-12S15		12	133	15	80	DIP	Single Output
DW2-12D05		12	±200	±5	75	DIP	Dual Output
DW2-12D12		12	±84	±12	80	DIP	Dual Output
DW2-12D15		12	±67	±15	80	DIP	Dual Output
DW2-24S05	18-36	24	400	5	75	DIP	Single Output
DW2-24S12		24	167	12	80	DIP	Single Output
DW2-24S15		24	133	15	80	DIP	Single Output
DW2-24D05		24	±200	±5	75	DIP	Dual Output
DW2-24D12		24	±84	±12	80	DIP	Dual Output
DW2-24D15		24	±67	±15	80	DIP	Dual Output
DW2-48S05	36-72	48	400	5	75	DIP	Single Output
DW2-48S12		48	167	12	80	DIP	Single Output
DW2-48S15		48	133	15	80	DIP	Single Output
DW2-48D05		48	±200	±5	75	DIP	Dual Output
DW2-48D12		48	±84	±12	80	DIP	Dual Output

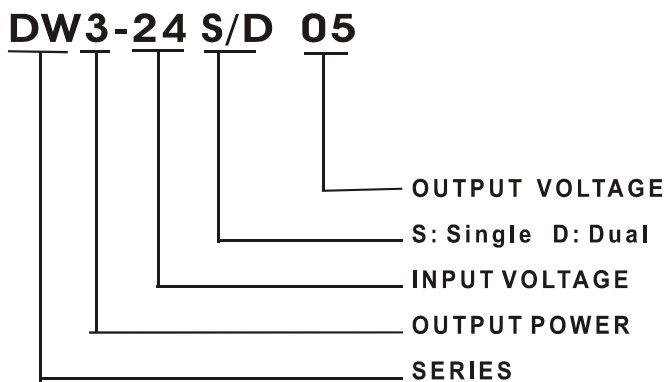
DW2-48D15		48	±67	±15	80	DIP	Dual Output
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PRODUCT LIST

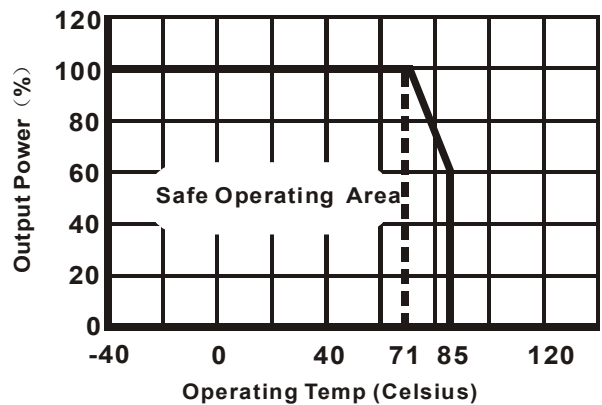
Part Number	Input Voltage (VDC)		Output		Efficiency (% Typ.)	Package	
	Range	Nominal	Current (mA)	Voltage (VDC)			
DW3-05D12	4.5-9	5	±125	12	68	DIP	Dual Output
DW3-05D15	4.5-9	5	±100	15	68	DIP	Dual Output
DW3-12S05	9-18	12	600	5	75	DIP	Single Output
DW3-12S12		12	250	12	80	DIP	Single Output
DW3-12S15		12	200	15	80	DIP	Single Output
DW3-12D05		12	±300	±5	75	DIP	Dual Output
DW3-12D12		12	±125	±12	80	DIP	Dual Output
DW3-12D15		12	±100	±15	80	DIP	Dual Output
DW3-24S05		18-36	24	600	5	75	DIP
DW3-24S12	24		250	12	80	DIP	Single Output
DW3-24S15	24		200	15	80	DIP	Single Output
DW3-24D05	24		±300	±5	75	DIP	Dual Output
DW3-24D12	24		±125	±12	80	DIP	Dual Output
DW3-24D15	24		±100	±15	80	DIP	Dual Output
DW3-48S05	36-72		48	600	5	78	DIP
DW3-48S12		48	250	12	80	DIP	Single Output
DW3-48S15		48	200	15	80	DIP	Single Output
DW3-48D05		48	±300	±5	75	DIP	Dual Output
DW3-48D12		48	±125	±12	80	DIP	Dual Output
DW3-48D15		48	±200	±15	80	DIP	Dual Output

- Note:**(1) A minimum 10% load is required on the output to meet the published specifications. Even though working at no load condition will not damage the device, it is not adoptable.
 (2) If the output power needed is smaller than rated, please connect a proper value resistor at output end in parallel to increase the load or contact us for a lower power product.
 (3) For lower noise and ripple, please use a “LC” filter network at the output. The capacitance must be at proper value in case of start-up problems.

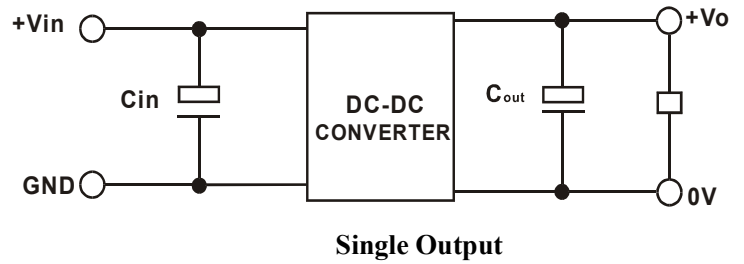
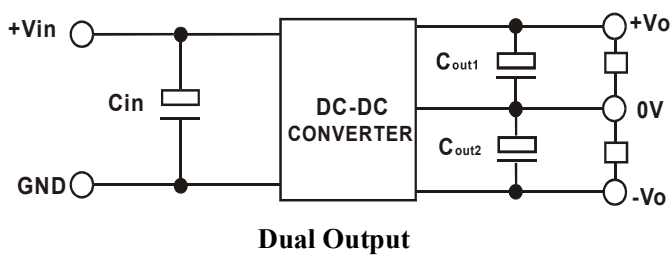
NOMENCLATURE



TEMPERATURE DERATING GRAPH

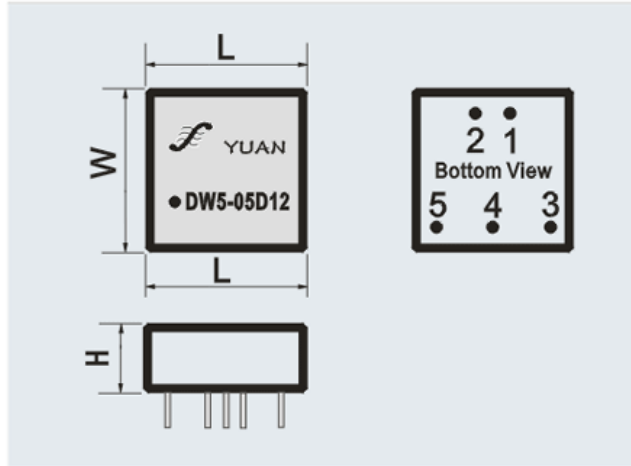


TYPICAL CONNECTION



OUTLINE DIMENSION Unit:mm

SIZE	SIP(LxWxH)	DIP(LxWxH)
DW	—	25.4x25.4x10.14



PINS DESCRIPTION

Single Output	Pin	Dual Output
+Vin	1	+Vin
GND	2	GND
+Vo	3	+Vo
Omitted	4	0V
0V	5	-Vo

PKG	Vin	GND	+Vo	0V	-Vo
DW-S	1	2	3	5	-
DW-D	1	2	3	4	5