

## 6-10W 2:1 Wide Input DC-DC Converter

### Features:

- >> Dual Output or Single Output
- >> Output power (W): 6/8/10/12
- >> Nominal input voltage (V): 5 / 12 / 24 / 48
- >> Input voltage range: 2:1
- >> Nominal output voltage (V): 5/9/12/15/24 /  $\pm 5 / \pm 9 / \pm 12 / \pm 15 / \pm 24$
- >> Isolation Voltage: 1000VDC
- >> Output Accuracy:  $<\pm 2\%$
- >> Metal shield package UL 94-V0
- >> Ripple / Noise (20MHZ Bandwidth)  $<150\text{mVp-p}$
- >> Over current short circuit protection



This series are mainly used in program-controlled switches, ATM switches, PBX, ISDN, cellular telecommunications.

### Product Operating Range:

Item	Test Condition	MIN.	TYP.	MAX.	Unit
Input Voltage Range	5V input	4.5	5	9	VDC
	12V input	9	12	18	
	24V input	12	24	36	
	48V input	24	48	72	
Output Power				12	W
Operating Temperature	*case surface temperature	-25		+60	°C
Storage Temperature		-55		+105	
Humidity		10		90	%
Cooling	Free Air Convection				

### Output Parameters:

Item	Test Condition	MIN.	TYP.	MAX.	Unit
Output Accuracy	Load Range:0%~100%			Main: 1.0, Secondary: 1.5	%
Voltage Regulation	Full Load			Main: 0.2, Secondary: 0.5	%
Load Regulation	Load Range:0%~100%			Main: 0.5, Secondary: 1.0	%
Over Current Protection	110%				
Ripple and Noise	20MHz Bandwidth	$V_o \leq 5V, V_{p-pmax} \leq 50\text{mV}$ $V_o \geq 48V, V_{p-pmax} \leq 200\text{mV}$ Other output: $V_{p-pmax} \leq 100\text{mVp-p}$			
Dynamic Respond Speed	25% ~full load	150us			
Start Delay Time	500ms				

### General Characteristics:

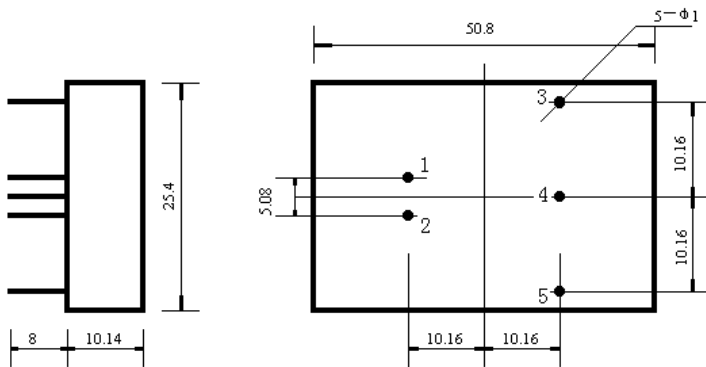
Item	Test Condition	MIN.	TYP.	MAX.	Unit
Switching Frequency			300K		Hz
Protection Features	Over current short circuit protection				
Isolation Voltage	Input /Output		1000		VDC
MTBF	1000000				
Temperature Coefficient	0.02%				

## Products List:

Input Voltage(V)		Output Voltage (VDC)	Output Current (A)	Efficiency (%)	Part No.	Output
Typ.	Range					
5	4.5~9.0	+12	0.6	80	DW6-05S12	Single
12	9.0~18	+5.0	+1.6	77	DW8-12S05	Single
24	18~36	+5.0	+2.0	79	DW10-24S05	Single
24	18~36	+12.0	+0.80	86	DW10-24S12	Single
24	18~36	+15.0	+0.66	86	DW10-24S15	Single
48	36~72	+12.0	+1.0	87	DW12-48S12	Single
48	36~72	+15.0	+0.80	87	DW12-48S15	Single
24	18~36	± 12.0	± 0.40	86	DW10-24D12	Dual
24	18~36	± 15.0	± 0.33	86	DW10-24D15	Dual
48	36~72	± 5.0	± 1.0	86	DW10-48D05	Dual
48	36~72	± 12.0	± 0.50	87	DW12-48D12	Dual
48	36~72	± 15.0	± 0.40	87	DW12-48D15	Dual

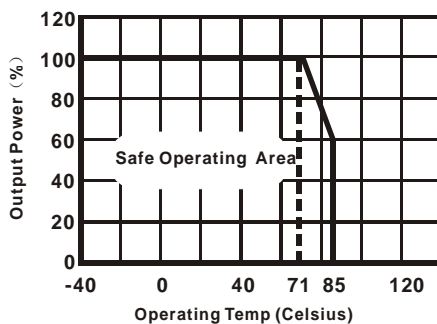
If need other input and output, please specified.

## Size(50.8x25.4x10.14mm)

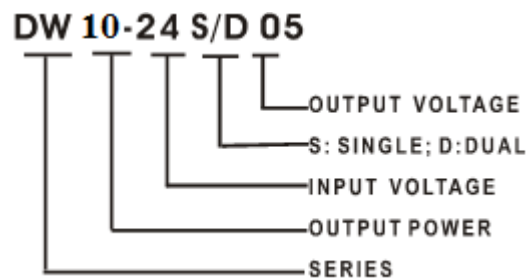


Footprint Function		
PIN	Single output	Dual output
1	-Vin	-Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	NC	Common
5	-Vout	-Vout

## TEMPERATURE DERATING GRAPH



## NOMENCLATURE



\*Specifications subject to change without notice