



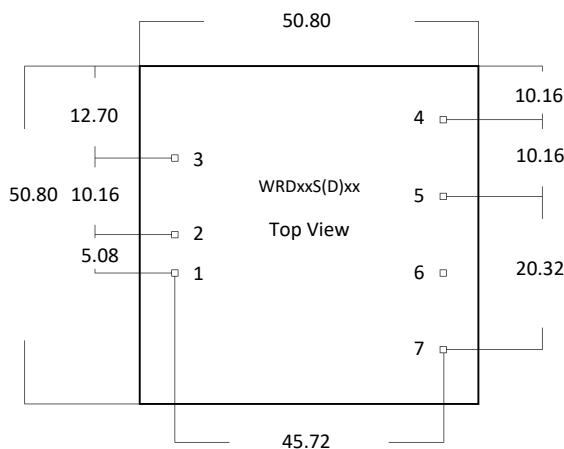
- 2:1 Voltage Input Range
- Both Metal Case and Plastic Case Available
- MTBF: 2.000.000 Calculated Hours
- Single or Dual Output
- Up 6000V Isolation Available

### Electrical Shortform Specifications

Electrical Specification	Input Voltage:	See Product Chart Page 2
	Output Voltage (Vout):	See Product Chart Page 2
	Switch Frequency:	150kHz to 200kHz
	Ripple & Noise:	Max. 50mVp-p
	Efficiency:	Up to 85%
	Output Load Efficiency:	≤ ±1% (0% to 100% Load)
	TEMP. Coefficient:	≤ ±0.02% °C (Celsius)
	MTBF:	2.000.000 Hours
Protection (Auto Recovery)	Isolation I/O:	1000V / 0.5mA for 1min (Up to 6000V Isolation Available)
	Short Circuit Protection:	Short Circuit (1sec)
	Over Load Protection:	Yes
	Over TEMP. Protection:	Yes
Certifications & EMC	Approvals:	CE / RoHS
	EMC	EN61000
Environmental	Operating TEMP.:	-45°C to +85°C
	Storage TEMP.:	-45°C to +125°C
	Cooling:	Natural Cooling
Dimension & Material	Case Material:	Metal
	Case Size (L x W x H):	50.80 x 50.80 x 12.70mm
	Weight:	51g (±0.5)
	Soldering Temperature:	≤10sec 300°C Max.

**Note** - Non Load Operation for a Long time is Not Recommended  
For Complete Datasheet/Specification and Drawing Please Contact Power Outlet

### Drawing & Measurements: mm



WRDxxSxx = Single Output (6-pin)

Pin	Function
1	Vin
2	GND
3	CNT
4	TRM
5	0V
6	+Vout

WRDxxDxx = Dual Output (7-pin)

Pin	Function
1	Vin
2	GND
3	CNT
4	TRM
5	-Vout
6	COM
7	+Vout

### Product Chart

Model	Input Voltage (Vdc)	Output Voltage (Vout)	Load Current (mA)	Efficiency (%)	Ripple & Noise (mVp-p Max.)
WRD12S3.3 30W	12Vdc (9-18Vdc)	3.3	9090	82	50
WRD12S05 30W		5	6000	83	50
WRD12S09 30W		9	3330	86	50
WRD12S12 30W		12	2500	86	50
WRD12S15 30W		15	2000	88	50
WRD12S24 30W		24	1250	83	50
WRD24S3.3 30W	24Vdc (18-36Vdc)	3.3	9090	88	50
WRD24S05 30W		5	6000	81	50
WRD24S09 30W		9	3330	82	50
WRD24S12 30W		12	2500	84	50
WRD24S15 30W		15	2000	75	50
WRD24S24 30W		24	1250	78	50
WRD48S3.3 30W	48Vdc (36-72Vdc)	3.3	9090	82	50
WRD48S05 30W		5	6000	84	50
WRD48S09 30W		9	3330	75	50
WRD48S12 30W		12	2500	78	50
WRD48S15 30W		15	2000	80	50
WRD48S24 30W		24	1250	81	50
WRD110S05 30W	110Vdc (70-150Vdc)	5	6000	84	50
WRD110S12 30W		12	2500	78	50
WRD110S24 30W		24	1250	81	50
<b>Regulated</b>					
WRD12D3.3 30W	12Vdc (9-18Vdc)	±3.3	±4545	82	50
WRD12D05 30W		±5	±3000	83	50
WRD12D09 30W		±9	±1665	86	50
WRD12D12 30W		±12	±1250	86	50
WRD12D15 30W		±15	±1000	88	50
WRD12D24 30W		±24	±625	83	50
WRD24D3.3 30W	24Vdc (18-36Vdc)	±3.3	±4545	88	50
WRD24D05 30W		±5	±3000	81	50
WRD24D09 30W		±9	±1665	82	50
WRD24D12 30W		±12	±1250	84	50
WRD24D15 30W		±15	±1000	75	50
WRD24D24 30W		±24	±625	78	50
WRD48D3.3 30W	48Vdc (36-72Vdc)	±3.3	±4545	82	50
WRD48D05 30W		±5	±3000	84	50
WRD48D09 30W		±9	±1665	75	50
WRD48D12 30W		±12	±1250	78	50
WRD48D15 30W		±15	±1000	80	50
WRD48D24 30W		±24	±625	81	50

\* For 3000V Isolation add Suffix "H3", 4000V Isolation "H4", 6000V Isolation "H6" (WRDxxS(D)xxHx xxW)