



WRD_(M)P-3W Series

3W, WIDE INPUT ISOLATED & REGULATED TWIN OUTPUT DIP DC-DC CONVERTER

multi-country patent protection **RoHS**

FEATURES

Wide (2:1) Input Range
Twin output
Operating Temperature: -40°C to +85°C
UL94-V0 Package
No external component required
Industry Standard Pin out
Short Circuit Protection (automatic recovery)
Five-sided metal shielding (WRD_MP)
MTBF > 1,000,000 hours
No Heat Sink Required
RoHS Compliance

APPLICATIONS

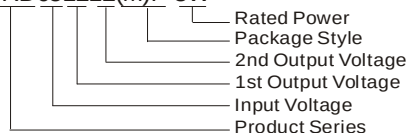
The WRD_(M) P-3W Series are specially designed for applications where a wide range input voltage power supplies are isolated from the input power supply in a distributed power supply system on a circuit board.

These products apply to:

- 1) Where the voltage of the input power supply is wide range (voltage range $\leq 2:1$);
- 2) Where isolation is necessary between (Isolation Voltage $\leq 1000\text{VDC}$);
- 3) Where the regulation of the output voltage and the output ripple noise are demanded.

MODEL SELECTION

WRD051212(M)P-3W



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PRODUCT PROGRAM

Part Number	Input				Output			Efficiency (%, Typ)
	Voltage (VDC)			No-load Current (mA, Typ)	Voltage (VDC)	Current(mA)		
	Nominal	Range	Max*			Max	Min	
WRD050505(M)P-3W	5	4.5-9.0	11	40	5	300	30	68
WRD050909(M)P-3W					9	166	16	70
WRD051212(M)P-3W					12	125	12	72
WRD051515(M)P-3W					15	100	10	73
WRD052424(M)P-3W					24	62	6	72
WRD120505(M)P-3W	12	9.0-18	22	20	5	300	30	74
WRD120909(M)P-3W					9	166	16	76
WRD121212(M)P-3W					12	125	12	80
WRD121515(M)P-3W					15	100	10	79
WRD122424(M)P-3W					24	62	6	81
WRD240505(M)P-3W	24	18-36	40	10	5	300	30	76
WRD240909(M)P-3W					9	166	16	78
WRD241212(M)P-3W					12	125	12	82
WRD241515(M)P-3W					15	100	10	80
WRD242424(M)P-3W					24	62	6	82
WRD480505(M)P-3W	48	36-72	80	5	5	300	30	76
WRD480909(M)P-3W					9	166	16	78
WRD481212(M)P-3W					12	125	12	80
WRD481515(M)P-3W					15	100	10	79
WRD482424(M)P-3W					24	62	6	82

* Input voltage can't exceed this value, or will cause the permanent damage.

Note: The load shouldn't be less than 10%, otherwise ripple will increase dramatically.

Operation under 10% load will not damage the converter; However, they may not meet all specification listed.

OUTPUT SPECIFICATIONS

Item	Test conditions	Min	Typ	Max	Units
Output power	Refer to below product program	0.3		3	W
Main output voltage accuracy	Refer to recommended circuit		± 1	± 3	%
Vice-output voltage accuracy	Refer to recommended circuit		± 3	± 5	
Load Regulation	From 10% to 100% load		± 0.5	$\pm 1^*$	
Line Regulation	Input voltage from low to high		± 0.2	± 0.5	
Temperature Drift (Vout)	Refer to recommended circuit			± 0.03	%/°C
Ripple**	20MHz Bandwidth		20	50	mVp-p
Noise**	20MHz Bandwidth		75	150	
Switching Frequency	100% load, nominal Input voltage		300		KHz
Isolation Capacitance			100		PF

*Dual output models unbalanced load: $\pm 5\%$.

**Test ripple and noise by "parallel cable" method. See detailed operation instructions at Testing of Power Converter section, application notes.

Note:

1. All specifications measured at $T_A = 25^\circ\text{C}$, humidity < 75%, nominal input voltage and rated output load unless otherwise specified.
2. See below recommended circuits for more details.

