

# DC/DC Converters

**XPiQ inc.**

Intelligent Design Quality Product



**10/15 Watts  
WD Series**



- 2:1 Input Range
- Isolated Outputs
- Efficiency to 82%
- 200 kHz Switching Frequency
- Input  $\pi$  Filter
- Fully Regulated Outputs
- Six-sided Shield

## Specification

### Input

- *Input Voltage Range* • See Table
- *Input Filter* •  $\pi$  Network

### Output

- *Voltage Accuracy* •  $\pm 1\%$  max
- *Line Regulation (Full Input Range)* •  $\pm 0.5\%$  max
- *Load Regulation (1/4 Full Load)* •  $\pm 1\%$  max
- *Ripple & Noise (DC-20MHz)* • 100mV p-p max
- *Temperature Coefficient* •  $\pm 0.05\%/^{\circ}\text{C}$  max
- *Short Circuit Protection* • Indefinite

### General

- *Switching Frequency* • 200 kHz
- *Efficiency* • See Table
- *Isolation (Input-Output)* • 500 VDC (1000 Mohm/80pF)

### Environmental

- *Operating Temperature* •  $-25^{\circ}\text{C}$  to  $+71^{\circ}\text{C}$
- *Storage Temperature* •  $-40^{\circ}\text{C}$  to  $100^{\circ}\text{C}$

### Safety

- *Safety Approvals* • UL1950 for LU versions only



## OUTPUT VOLTAGE & CURRENT RATINGS

WD

Model	Input Voltage	Output Voltage	Output Current	Input Current		% Efficiency
				No Load	Full Load	
WD501	4.7-9.0VDC	5.0 VDC	1600 mA	15 mA	2130 mA	75
WD502	4.7-9.0VDC	12.0 VDC	666 mA	15 mA	2100 mA	76
WD503	4.7-9.0VDC	15.0 VDC	533 mA	15 mA	2100 mA	76
WD504	4.7-9.0VDC	±12.0 VDC	±333 mA	15 mA	2100 mA	76
WD505	4.7-9.0VDC	±15.0 VDC	±266 mA	15 mA	2100 mA	76
WD506	4.7-9.0VDC	±5.0 VDC	±800 mA	15 mA	2100 mA	76
WD100	9.0-18.0 VDC	3.3 VDC	3000 mA	20 mA	1056 mA	76
WD101	9.0-18.0 VDC	5.0 VDC	2000 mA	30 mA	1100 mA	76
WD102	9.0-18.0 VDC	12.0 VDC	830 mA	30 mA	1065 mA	78
WD103	9.0-18.0 VDC	15.0 VDC	666 mA	30 mA	1065 mA	78
WD104	9.0-18.0 VDC	±12.0 VDC	±415 mA	40 mA	1065 mA	78
WD105	9.0-18.0 VDC	±15.0 VDC	±333 mA	40 mA	1065 mA	78
WD106	9.0-18.0 VDC	±5.0 VDC	±1000 mA	40 mA	1065 mA	78
WD200	18.0-36.0 VDC	3.3 VDC	3000 mA	20 mA	543 mA	76
WD201	18.0-36.0 VDC	5.0 VDC	3000 mA	20 mA	800 mA	78
WD202	18.0-36.0 VDC	12.0 VDC	1250 mA	20 mA	780 mA	80
WD203	18.0-36.0 VDC	15.0 VDC	1000 mA	20 mA	780 mA	80
WD204	18.0-36.0 VDC	±12.0 VDC	±625 mA	30 mA	780 mA	80
WD205	18.0-36.0 VDC	±15.0 VDC	±500 mA	30 mA	780 mA	80
WD206	18.0-36.0 VDC	±5.0 VDC	±1500 mA	30 mA	780 mA	80
WD300	36.0-72.0 VDC	3.3 VDC	3000 mA	15 mA	272 mA	76
WD301	36.0-72.0 VDC	5.0 VDC	3000 mA	10 mA	390 mA	80
WD302	36.0-72.0 VDC	12.0 VDC	1250 mA	10 mA	380 mA	82
WD303	36.0-72.0 VDC	15.0 VDC	1000 mA	10 mA	380 mA	82
WD304	36.0-72.0 VDC	±12.0 VDC	±625 mA	15 mA	380 mA	82
WD305	36.0-72.0 VDC	±15.0 VDC	±500 mA	15 mA	380 mA	82
WD306	36.0-72.0 VDC	±5.0 VDC	±1500 mA	15 mA	380 mA	82

**Notes**

Nominal Input Voltage 5, 12, 24 or 48 VDC.

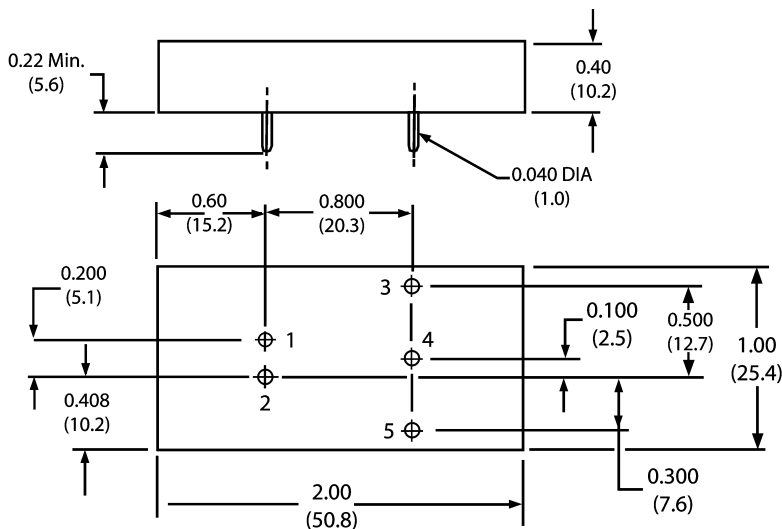
For optional 10 watt version:

Add Suffix "L" to WD2xx and WD3xx, except models WD200 and WD300.

UL1950 approvals available on 10 watt models only. Add suffix "LU" to models WD1xx, WD2xx or WD3xx.

Not available on WD5xx series.

**Mechanical Details**



PIN	SINGLE OUTPUT	DUAL OUTPUT
1	+ INPUT	+ INPUT
2	- INPUT	- INPUT
3	+ OUTPUT	+ OUTPUT
4	NO PIN	COMMON
5	- OUTPUT	- OUTPUT

Dimensions in inches (mm)

