

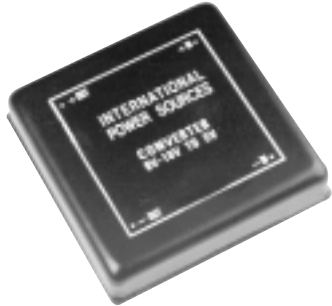
DC/DC Converters

XPiQ inc.

Intelligent Design Quality Product



25/30 Watts
WF Series



- 2:1 Input Range
- Efficiency to 85%
- 300kHz Switching Frequency
- Overvoltage Protection
- Remote Disable
- Six-sided Shield
- External Output Trim

Specification

All specifications are typical at 25°C, nominal line & 75% load

Input

- Input Voltage Range • See Table
- Input Filter • π Type

Output

- Voltage Accuracy •
 - Single output, $\pm 2\%$ max.
 - Dual + output, $\pm 2\%$ max.
 - Dual - output, $\pm 3\%$ max.
 - Triple 5V, $\pm 2\%$ max.
 - 12V/15V, $\pm 5\%$ max.

Voltage Balance

- Dual Output at full load • $\pm 1\%$ max.

Transient Response

- Single, 25% Step Load Change • $< 500\mu$ sec
- Dual, FL=1/2L $\pm 1\%$ Error Band • $< 500\mu$ sec

External Trim

- Adj. Range • $\pm 10\%$
- Ripple & Noise (20MHz BW) • 10mV RMS, max
75m V p-p max.
- Temperature Coefficient • $\pm 0.02\%/^{\circ}\text{C}$ max.
- Short Circuit Protection • Indefinite

Line Regulation

- Single/Dual Output • $\pm 0.5\%$ max.
- Triple Output • $\pm 1.0\%$ max.

Load Regulation

- Single/Dual Output • $\pm 1.0\%$ max.
- Triple Output • $\pm 5.0\%$ max.

General

- Efficiency • See Table
- Isolation Voltage • 500 VDC min
- Isolation Resistance • 10^9 ohms min.
- Switching Frequency • 300 kHz
- Case Grounding • Capacity Coupled to Input
- Operating Temperature Range • -25°C to $+100^{\circ}\text{C}$
- Storage Temperature Range • -55°C to $+105^{\circ}\text{C}$

Environmental

- EMI/RFI • Six-sided Continuous Shield
- Case Temperature • 100°C max
- Case Material • Black Coated Copper with Non-Conductive Base
- Dimensions • 2 x 2 x 0.40 inches
(50.8 x 50.8 x 10.2 mm)
- Safety Approvals • UL1950 for U versions only



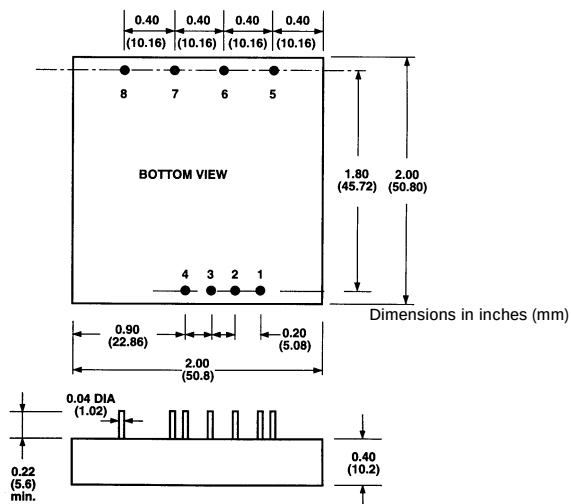
OUTPUT VOLTAGE & CURRENT RATINGS

WF

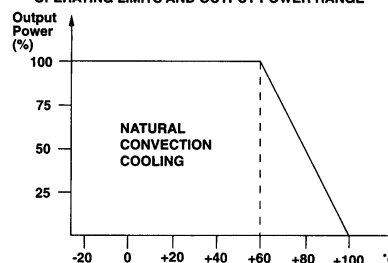
Model	Input Voltage	Output Voltage	Output Current	Input Current		% Efficiency
				No Load	Full Load	
WF100	9-18 VDC	3.3 VDC	5000 mA	30 mA	1860 mA	74
WF101	9-18 VDC	5.0 VDC	5000 mA	30 mA	2675 mA	78
WF102	9-18 VDC	12.0 VDC	2500 mA	30 mA	3050 mA	82
WF103	9-18 VDC	15.0 VDC	2000 mA	30 mA	3050 mA	82
WF104	9-18 VDC	±5.0 VDC	±2500 mA	35 mA	2675 mA	78
WF105	9-18 VDC	±12.0 VDC	±1250 mA	35 mA	3050 mA	82
WF106	9-18 VDC	±15.0 VDC	±1000 mA	35 mA	3050 mA	82
WF107	9-18 VDC	5.0/±12.0 VDC	3500/±310 mA	35 mA	2640 mA	79
WF108	9-18 VDC	5.0/±15.0 VDC	3500/±250 mA	35 mA	2640 mA	79
WF200	18-36 VDC	3.3 VDC	5000 mA	30 mA	920 mA	75
WF201	18-36 VDC	5.0 VDC	5000 mA	30 mA	1336 mA	79
WF202	18-36 VDC	12.0 VDC	2500 mA	30 mA	1525 mA	82
WF203	18-36 VDC	15.0 VDC	2000 mA	30 mA	1525 mA	82
WF204	18-36 VDC	±5.0 VDC	±2500 mA	30 mA	1336 mA	79
WF205	18-36 VDC	±12.0 VDC	±1250 mA	30 mA	1470 mA	85
WF206	18-36 VDC	±15.0 VDC	±1000 mA	30 mA	1470 mA	85
WF207	18-36 VDC	5.0/±12.0 VDC	3500/±310 mA	30 mA	1320 mA	80
WF208	18-36 VDC	5.0/±15.0 VDC	3500/±250 mA	30 mA	1320 mA	80
WF300	36-72 VDC	3.3 VDC	5000 mA	20 mA	460 mA	75
WF301	36-72 VDC	5.0 VDC	5000 mA	20 mA	660 mA	79
WF302	36-72 VDC	12.0 VDC	2500 mA	20 mA	765 mA	82
WF303	36-72 VDC	15.0 VDC	2000 mA	20 mA	765 mA	82
WF304	36-72 VDC	±5.0 VDC	±2500 mA	25 mA	660 mA	79
WF305	36-72 VDC	±12.0 VDC	±1250 mA	25 mA	735 mA	85
WF306	36-72 VDC	±15.0 VDC	±1000 mA	25 mA	735 mA	85
WF307	36-72 VDC	5.0/±12.0 VDC	3500/±310 mA	25 mA	655 mA	80
WF308	36-72 VDC	5.0/±15.0 VDC	3500/±250 mA	25 mA	655 mA	80

For optional UL1950 approved product, add suffix "U" to part number.

Mechanical Details



OPERATING LIMITS AND OUTPUT POWER RANGE



Triple Output Loading Table ⁽¹⁾			
Output (Pin No.)	Voltage	Amperes	
		Min. ⁽²⁾	Nom.
7	+5	0.50	3.50
8 & 5	+12 or -12	0.10	0.31
8 & 5	+15 or -15	0.10	0.25

Notes:

- Maximum total power from all outputs is limited to 25 watts but no output should be allowed to exceed its maximum current.
- Minimum current on each output is required to maintain specified regulation.

EXTERNAL OUTPUT TRIMMING

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.

