25-30 Watts

WF Series

- 2:1 Input Range
- Efficiency to 85%
- Input Pi Filter
- Single, Dual & Triple Outputs
- Remote On/Off
- Six-sided Metal Case
- External Output Trim

Specification

Input

Input Voltage Range	• See table
Input Current	• See Table
Input Filter	• Pi network
Undervoltage Lockout	• Turn On >70% nominal input Turn Off <65% nominal input

Output

Initial Set Accuracy	• Single output models: ±2% max Dual output models: ±2% max V1 ±3% max V2 Triple output models: ±2% max V1 ±5% max V2 & V3
Output Voltage Adjustment	• ±10% (except triple output models)
Minimum Load	• Triple output models only
Voltage Balance Dual Output	• ±1.0% max at full load
Line Regulation	• ±0.5% max single & dual output models, ±1.0% max triple output models
Load Regulation	• ±1.0% max single & dual output models, ±5.0% max triple output models
Transient Response	• 5% max deviation, recovery to within 1% in 500 µs for a 25% step load change
Ripple & Noise	• 10 mV RMS max 75 mV pk-pk max, 20 MHz BW
Short Circuit Protection	• Continuous, trip & restart (hiccup mode) with auto recovery
Temperature Coefficient	• 0.02%/°C max
Remote On/Off	• On >5.5 VDC or open circuit Off <1.8 VDC or short to Vin

General

Efficiency	• See table
Isolation Voltage	• 500 VDC min (3000 VDC for 'U' version)
Isolation Resistance	• 10^9 ohms min
Switching Frequency	• 300 kHz typical
MTBF	• >800 kHrs to MIL-STD-217F

Environmental

Operating Temperature	• -25 °C to +100 °C (see derating curve)
Storage Temperature	• -40 °C to +100 °C
EMI/RFI	• Six-sided continuous shield

EMC & Safety

Emissions	• EN55022, level A Conducted EN55022, level A Radiated
ESD Immunity	• EN61000-4-2, level 2 Perf Criteria A
Radiated Immunity	• EN61000-4-3 3 V/m Perf Criteria A
Conducted Immunity	• EN61000-4-6 3 V rms Perf Criteria A
Safety Approvals	• UL60950-1 for 'U' versions only

Models and Ratings

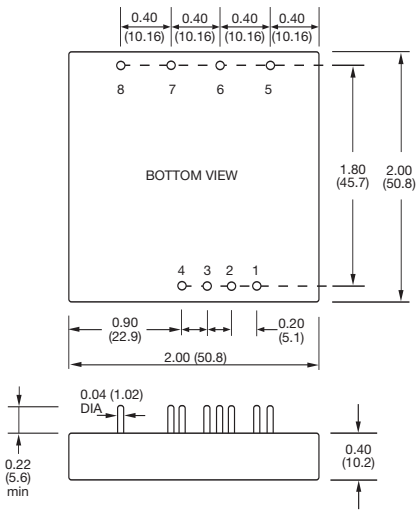
Input Voltage	Output Voltage	Output Current	Input Current		Efficiency	Model Number[1]
			No Load	Full Load		
9-18 VDC	3.3 VDC	5.00 A	30 mA	1.86 A	74%	WF100
	5.0 VDC	5.00 A	30 mA	2.67 A	78%	WF101
	12.0 VDC	2.50 A	30 mA	3.05 A	82%	WF102
	15.0 VDC	2.00 A	30 mA	3.05 A	82%	WF103
	±5.0 VDC	±2.50 A	35 mA	2.67 A	78%	WF104
	±12.0 VDC	±1.25 A	35 mA	3.05 A	82%	WF105
	±15.0 VDC	±1.00 A	35 mA	3.05 A	82%	WF106
	5.0/±12.0 VDC	3.50/±0.31 A	35 mA	2.64 A	79%	WF107
	5.0/±15.0 VDC	3.50/±0.25 A	35 mA	2.64 A	79%	WF108
18-36 VDC	3.3 VDC	5.00 A	30 mA	0.92 A	75%	WF200
	5.0 VDC	5.00 A	30 mA	1.34 A	79%	WF201
	12.0 VDC	2.50 A	30 mA	1.52 A	82%	WF202
	15.0 VDC	2.00 A	30 mA	1.52 A	82%	WF203
	±5.0 VDC	±2.50 A	30 mA	1.34 A	79%	WF204
	±12.0 VDC	±1.25 A	30 mA	1.47 A	85%	WF205
	±15.0 VDC	±1.00 A	30 mA	1.47 A	85%	WF206
	5.0/±12.0 VDC	3.50/±0.31 A	30 mA	1.32 A	80%	WF207
	5.0/±15.0 VDC	3.50/±0.25 A	30 mA	1.32 A	80%	WF208
36-72 VDC	3.3 VDC	5.00 A	20 mA	0.46 A	75%	WF300
	5.0 VDC	5.00 A	20 mA	0.66 A	79%	WF301
	12.0 VDC	2.50 A	20 mA	0.76 A	82%	WF302
	15.0 VDC	2.00 A	20 mA	0.76 A	82%	WF303
	±5.0 VDC	±2.50 A	25 mA	0.66 A	79%	WF304
	±12.0 VDC	±1.25 A	25 mA	0.73 A	85%	WF305
	±15.0 VDC	±1.00 A	25 mA	0.73 A	85%	WF306
	5.0/±12.0 VDC	3.50/±0.31 A	25 mA	0.65 A	80%	WF307
	5.0/±15.0 VDC	3.50/±0.25 A	25 mA	0.65 A	80%	WF308

Notes

1. For optional UL60950-1 approved product, add suffix 'U' to model number.

Mechanical Details

All dimensions are in inches (mm)



Weight: 0.15 lbs (66 g) approx.
Case Material: Black coated copper with non-conductive base.

PIN CONNECTIONS			
Pin	Single Output	Dual Output	Triple Output
1	Remote On/Off	Remote On/Off	Remote On/Off
2	No pin	No pin	No pin
3	-V input	-V input	-V input
4	+V input	+V input	+V input
5	Output trim	Output trim	-Output
6	-Output	-Output	Common
7	+Output	Common	+5V Output
8	No pin	+Output	+Output

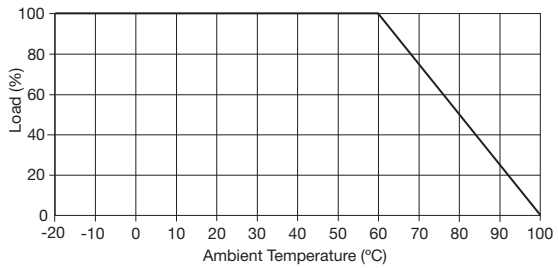
TRIPLE OUTPUT LOADING TABLE[1]			
Output Pin No.	Voltage	Current	
		Minimum[2]	Maximum
7	+5	0.50 A	3.50 A
8 & 5	+12 or -12	0.10 A	0.31 A
8 & 5	+15 or -15	0.10 A	0.25 A

Notes

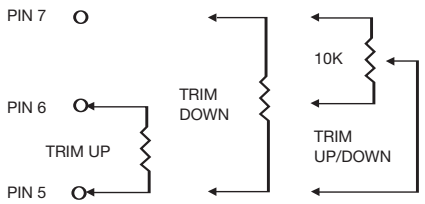
1. Maximum total power from all outputs is limited to 25 W but no output should be allowed to exceed its maximum current.
2. Minimum current on each output is required to maintain specified regulation.

Application Notes

Derating Curve



External Output Trimming



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