



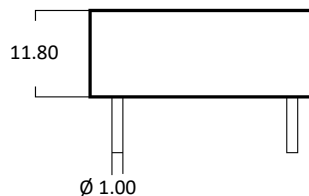
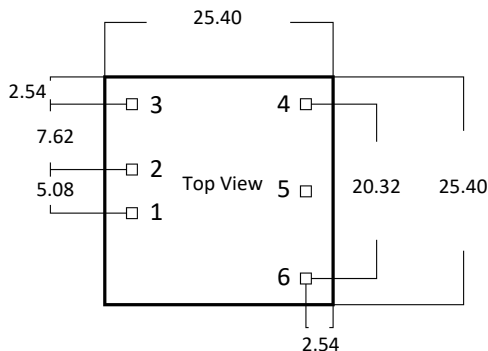
- 2:1 Voltage Input Range
- Both Metal Case and Plastic Case Available
- MTBF: 2.000.000 Calculated Hours
- Single or Dual Output
- Up to 3000V Isolation Available

Electrical Shortform Specifications

Electrical Specification	Input Voltage:	See Product Chart Page 2
	Output Voltage (Vout):	See Product Chart Page 2
	Switch Frequency:	270kHz to 400kHz
	Input Characteristic:	Built In - Output Filter
	Ripple:	Max. 100mVp-p
	Noise:	Max. 120mVp-p
	Efficiency:	Up to 85%
	Output Load Efficiency:	≤ ±1% (0% to 100% Load)
	TEMP. Coefficient:	≤ ±0.02% °C (Celsius)
Protection (Auto Recovery)	MTBF:	2.000.000 Hours
	Isolation I/O:	1000V / 0.5mA for 1min (Up to 3000V is Available)
	Short Circuit Protection:	Short Circuit (1sec)
	Over Load Protection:	Yes
Certifications & EMC	Over TEMP. Protection:	Yes
	Approvals:	CE / RoHS
Environmental	EMC	EN61000
	Operating TEMP.:	-25°C to +85°C
	Storage TEMP.:	-25°C to +125°C
Dimension & Material	Cooling:	Natural Cooling
	Case Material:	Metal or Plastic
	Case Size (L x W x H):	25.40 x 25.40 x 11.80mm
	Weight:	12g (±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



WRFDxxSxx - Single Output

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

WRFDxxDxx - Dual Output

Pin	Function
1	GND
2	Vin
3	NC
4	-Vout
5	Com
6	+Vout

Product Chart

Model	Input Voltage (Vdc)	Output Voltage (Vout)	Load Current (mA)	Efficiency (%)	Ripple & Noise (mVp-p Max.)
WRFD05S05 20W	5Vdc (4.5-9Vdc)	5	4000	76	100/120
WRFD05S12 20W		12	1666	80	100/120
WRFD05S15 20W		15	1333	80	100/120
WRFD05S24 20W		24	833	80	100/120
WRFD12S05 20W	12Vdc (9-18Vdc)	5	4000	76	100/120
WRFD12S12 20W		12	1666	80	100/120
WRFD12S15 20W		15	1333	80	100/120
WRFD12S24 20W		24	833	80	100/120
WRFD24S05 20W	24Vdc (18-36Vdc)	5	4000	76	100/120
WRFD24S12 20W		12	1666	80	100/120
WRFD24S15 20W		15	1333	80	100/120
WRFD24S24 20W		24	833	80	100/120
WRFD48S05 20W	48Vdc (36-72Vdc)	5	4000	76	100/120
WRFD48S12 20W		12	1666	80	100/120
WRFD48S15 20W		15	1333	80	100/120
WRFD48S24 20W		24	833	80	100/120
WRFD110S05 20W	110Vdc (70-150Vdc)	5	4000	76	100/120
WRFD110S12 20W		12	1666	80	100/120
WRFD110S24 20W		24	833	80	100/120
WRFD05D05 20W	5Vdc (4.5-9Vdc)	±5	±2000	76	100/120
WRFD05D12 20W		±12	±833	80	100/120
WRFD05D15 20W		±15	±667	80	100/120
WRFD05D24 20W		±24	±416	80	100/120
WRFD12D05 20W	12Vdc (9-18Vdc)	±5	±2000	76	100/120
WRFD12D12 20W		±12	±833	80	100/120
WRFD12D15 20W		±15	±667	80	100/120
WRFD12D24 20W		±24	±416	80	100/120
WRFD24D05 20W	24Vdc (18-36Vdc)	±5	±2000	76	100/120
WRFD24D12 20W		±12	±833	80	100/120
WRFD24D15 20W		±15	±667	80	100/120
WRFD24SD4 20W		±24	±416	80	100/120
WRFD48D05 20W	48Vdc (36-72Vdc)	±5	±2000	76	100/120
WRFD48D12 20W		±12	±833	80	100/120
WRFD48D15 20W		±15	±667	80	100/120
WRFD48D24 20W		±24	±416	80	100/120
WRFD110D05 20W	110Vdc (70-150Vdc)	±5	±2000	76	100/120
WRFD110D12 20W		±12	±833	80	100/120
WRFD110D24 20W		±24	±416	80	100/120

* For 3000V Isolation add Suffix "H3" (WRDxxS(D)xxHx xxW)