



SUPERWORLD ELECTRONICS

SW6R WF Series – 6W Wide Input Single & Dual Output DC-DC Converter



RoHS Compliant



FEATURES

- Industry standard E & L packages
- Wide Input Ranges 18-36 & 36-75 Vdc
- Single & Dual 1500Vdc Isolated Outputs
- Operating Temp Range -40°C to 100°C
- High Efficiencies to 85%
- Continuous Short Circuit Protection
- Undervoltage Lock-out
- Metal Casing
- 2 Year Warranty
- Internal Input and Output Filtering

SW6R WF PRODUCT RANGE					
Model	Vin (Vdc)	Vout (Vdc)	Iout (mA)	Iin (rated) (mA)	Eff. (%)
SW6R24S03WF	18-36	3.3	1818	165	76
SW6R24S05WF	18-36	5	1200	150	80
SW6R24S09WF	18-36	9	666	150	82
SW6R24S12WF	18-36	12	500	150	83
SW6R24S15WF	18-36	15	400	135	85
SW6R24D03WF	18-36	± 3.3	± 908	83	74
SW6R24D05WF	18-36	± 5	± 600	75	78
SW6R24D09WF	18-36	± 9	± 334	75	80
SW6R24D12WF	18-36	± 12	± 250	75	82
SW6R24D15WF	18-36	± 15	± 200	68	84
SW6R48S03WF	36-75	3.3	1818	165	76
SW6R48S05WF	36-75	5	1200	150	80
SW6R48S09WF	36-75	9	666	150	82
SW6R48S12WF	36-75	12	500	150	83
SW6R48S15WF	36-75	15	400	135	85
SW6R48D03WF	36-75	± 3.3	± 908	83	74
SW6R48D05WF	36-75	± 5	± 600	75	78
SW6R48D09WF	36-75	± 9	± 334	75	80
SW6R48D12WF	36-75	± 12	± 250	75	82
SW6R48D15WF	36-75	± 15	± 200	68	84

DESCRIPTION

The SW6R WF Series is a 1500Vdc isolated range of single and dual output 6W DC-DC converters, designed with a 2:1 input voltage range and ideal for use in a whole variety of telecoms, industrial and distributed power applications. Available in industry standard E and L DIP packages (32 x 20 x 9 mm), the SW6R WF is fully encapsulated in a metal case and is designed to meet EN60950 and UL1950 safety standards. Continuous SC protection and UVLO are some of the many SW6R WF features.

MECHANICAL
(E Package)

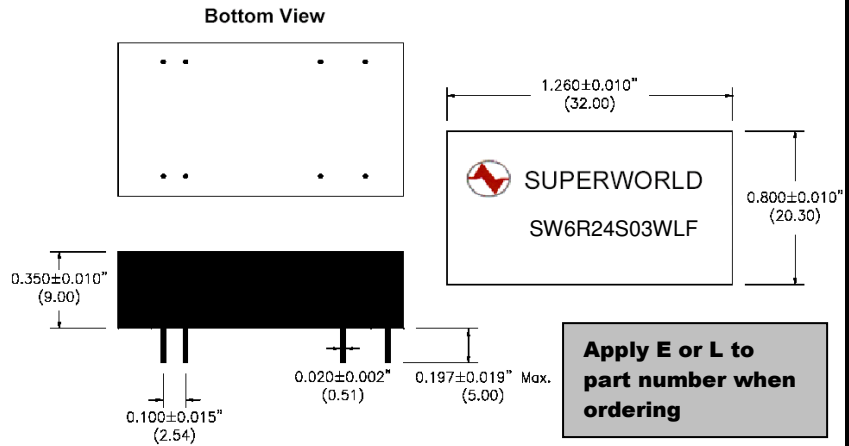
Pin	Singles	Dual
1	+Vin	+Vin
2	NC	-Vout
3	NC	Common
10	-Vout	Common
11	+Vout	+Vout
12	-Vin	-Vin
13	-Vin	-Vin
14	+Vout	+Vout
15	-Vout	Common
22	NC	Common
23	NC	-Vout
24	+Vin	+Vout

Bottom View

Apply E or L to part number when ordering

MECHANICAL (L Package)

Pin	Singles	Dual
2	-Vin	-Vin
3	-Vin	-Vin
9	NC	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22	+Vin	+Vin
23	+Vin	+Vin



SW6R WF INPUT SPECIFICATIONS

PARAMETER	CONDITIONS	MIN	TYPICAL	MAX	UNITS
Input Current (No Load)	All models		20		mA
Voltage Range	SW6R24	18	24	36	Vdc
	SW6R48	36	48	75	Vdc
Transient Input Voltage (1msec)	SW6R24			50	Vdc
	SW6R48			100	Vdc
Undervoltage Lockout (SW6R24)	On			17.5	Vdc
Undervoltage Lockout (SW6R48)	Off	16			
	On			34.5	
	Off	32.5			
Reflected Ripple Current			35		mA _{p-p}

SW6R WF OUTPUT SPECIFICATIONS

PARAMETER	CONDITIONS	MIN	TYPICAL	MAX	UNITS
Rated Power	All models			6.0	W
Voltage Setpoint Accuracy				± 5	%
Line Regulation	1% change in Vin		± 0.5	± 2	%
Load Regulation	(10% load to rated load)		± 1	± 3	%
Ripple & Noise	BW = DC to 20MHz			1%	mV _{p-p}
Current Limit	120% x I _{out}			7.2	W
Output Overvoltage Clamp				120	% V _{out}
Temperature Coefficient		± 0.008			%/°C
Short Circuit Protection				1	second

SW6R WF GENERAL CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYPICAL	MAX	UNITS
Temperature	Temperature (Ambient)	-25		70	°C
	Temperature (Case)	-40		100	°C
	Storage	-40		100	°C
Isolation	Isolation Test Voltage	1500			Vdc
	Resistance	10			GΩ
	Capacitance		20		pF
	Leakage Current		20		μArms
Switching Frequency			150		kHz
MTTF (Ta = 25 °C)	MIL-HDBK-217E		450000		hrs
Weight				20	g

Superworld Electronics (S) Pte Ltd

16 New Industrial Road #06-01 to 08 Hudson TechnoCentre Singapore 536204

Tel : (65) 6298 2866

Fax : (65) 6298 8900

Email : sales@superworld.com.sg