



SUPERWORLD ELECTRONICS

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



RoHS Compliant



FEATURES

- Industry standard E & L packages
- Ultra-Wide Input Range 18-75 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

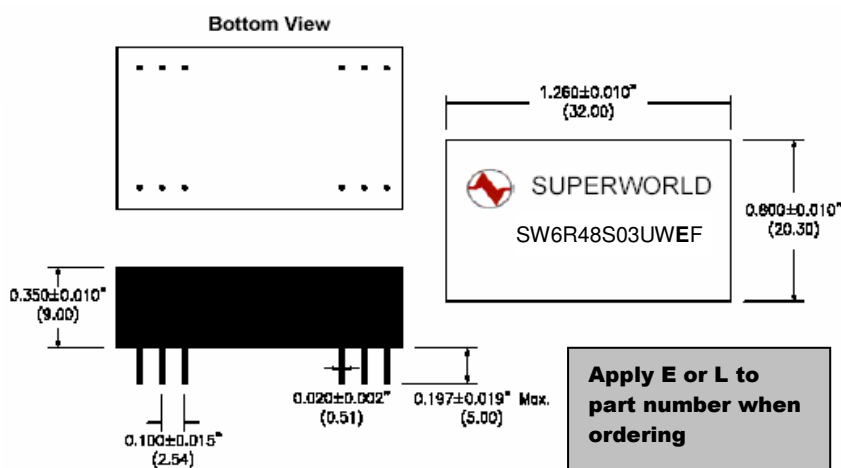
SW6R UW PRODUCT RANGE					
Model	Vin (Vdc)	Vout (Vdc)	Iout (mA)	Iin (rated) (mA)	Eff. (%)
SW6R48S03UWF	18-75	3.3	1818	330	76
SW6R48S05UWF	18-75	5	1200	300	80
SW6R48S09UWF	18-75	9	666	300	82
SW6R48S12UWF	18-75	12	500	300	83
SW6R48S15UWF	18-75	15	400	270	85
SW6R48D03UWF	18-75	± 3.3	± 909	167	74
SW6R48D05UWF	18-75	± 5	± 600	150	78
SW6R48D09UWF	18-75	± 9	± 333	150	80
SW6R48D12UWF	18-75	± 12	± 250	150	82
SW6R48D15UWF	18-75	± 15	± 200	137	84

DESCRIPTION

The SW6R UW Series is a 1500Vdc isolated range of single and dual output 6W DC-DC converters, designed with a 4:1 input voltage range and ideal for use in a whole variety of telecoms, industrial and distributed power applications. The ultra-wide input range and large number of output options ensures a product that meets the requirements of the most challenging of environments. Available in industry standard E and L DIP packages (32 x 20 x 9 mm), the SW6R UW 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 W features.

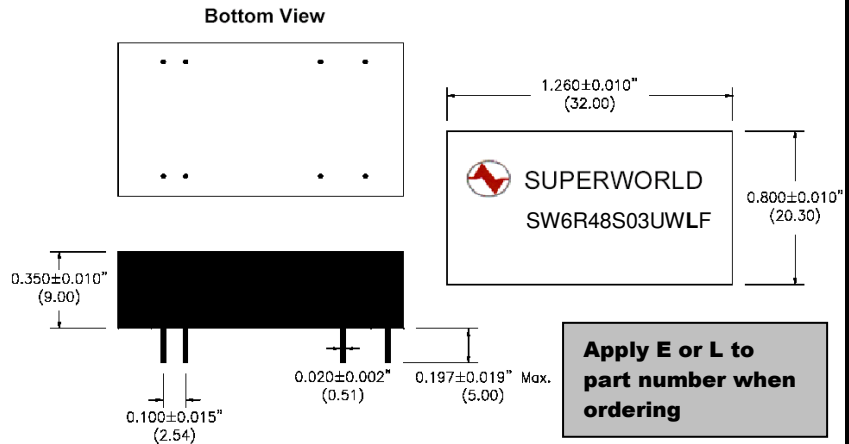
MECHANICAL (E Package)

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



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 UW INPUT SPECIFICATIONS

PARAMETER	CONDITIONS	MIN	TYPICAL	MAX	UNITS
Input Current (No Load)	All models		20		mA
Voltage Range		18		75	Vdc
Transient Input Voltage (1msec)				100	Vdc
Undervoltage Lockout	On			17.5	Vdc
	Off	16			
Reflected Ripple Current			35		mAp-p

SW6R UW 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%	mVp-p
Current Limit	120% x Iout			7.2	W
Output Overvoltage Clamp				120	% Vout
Temperature Coefficient		± 0.008			%/°C
Short Circuit Protection				1	second

SW6R UW 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

Refer to Medium Power Application Note 1 for additional Performance Curves & Data

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