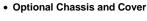
# 25 WATTS

## **SRP-25 SERIES AC-DC**

# FEATURES:

- RoHS Compliant
- Universal 85-264 VAC Input
- Advanced SMT Design
- 2 Year Warranty
- Fits 1U Applications
- One to Three Outputs
- EN 60950-1 ITE Certification
- EN 60601-1 Medical Certification
- Compact 2.25" x 4.00" x .96" Size Class B Emissions per EN 55011/22
  - EMC to EN 61000-6-2 & EN 60601-1-2





#### **OPEN FRAME**

CHASSIS/COVER

SAFET)	SPECIFI	CATIONS

General		Protection Cla: Overvoltage C Pollution Degr	ategory: II
c <b>FLL</b> us	Underwriters Laboratories File E137708/E140259		<sup>nd</sup> Edition, 2007 <sup>st</sup> Edition, 2006
IECEE Scheme		National and C IEC 60950-1/A IEC 60601-1:1	ertificates (including all Group Deviations) (1:2009, Second Edition 988 +A1:1991 +A2:1995 (005 Third Edition
c <b>FN</b> us	UL Recognition Mark for Canada File E137708/E140259	2 <sup>nd</sup> Edition	2.2 No. 60950-1-07, 2.2 No. 601-1-M90, 2005
	TUV		
<u>(</u> €	Low Voltage Directive RoHS Directive (Recast)		
	File E137708/E140259 TUV Low Voltage Directive RoHS Directive (Recast)	2nd Edition         CAN/CSA-C22.2 No. 601-1-M90, 2005         EN 60950-1/A12:2011         EN 60601-1/A2:1995         (2006/95/EC of December 2006)         (2011/65/EU of June 2011)             OUTPUT 2       OUTPUT 3         +12V/1.5A       -12V/0.5A	

SRP-25-3001	+5V/3A	+12V/1.5A	-12V/0.5A
SRP-25-3002	+5V/3A	+15V/1.5A	-15V/0.5A
SRP-25-3003	3.3V/2.5A	6V/2A	5V/1A
SRP-25-2001	+5V/3A	+24V/1A	
SRP-25-2002	+5V/3A	+12V/1.5A	
SRP-25-2003	+5V/3A	-5V/2A	
SRP-25-2004	+12V/1.5A	-12V/1.5A	
SRP-25-2005	+15V/1.5A	-15V/1.5A	
SRP-25-1001	3.3V/6A		
SRP-25-1002	5V/5A		
SRP-25-1003	12V/2.08A		
SRP-25-1004	15V/1.67A		
SRP-25-1005	24V/1.04A		
SRP-25-1006	48V/0.52A		

#### NOTES

Consult factory for alternate output configurations.

Consult factory for positive, negative or floating output 2 or 3.

Refer to Applications Information for complete output power ratings.

All specifications are maximum at 25° C, 25W unless otherwise stated, may vary by model and

are subject to change without notice.

Specify optional chassis and cover when ordering.

OUTPUT SPECIFICAT Total Output Power	25W (20W, 1001	)	
Output Voltage Centering	Output 1:	+ 0.25%	(All outputs
	Output 2:	± 5.0%	at 50% laod)
	Output 3:	± 2.0%	,
Output Voltage Adjust Range	Output 1:	95 - 105%	
Load Regulation	Output 1:	0.5%	(0-100% load change)
-	Output 2:	5.0%	(10-100% load change)
	Output 2: (2003)		(30-100% load change)
	Output 3:	1.0%	(0-100% load change)
Source Regulation	Outputs 1 – 3:	0.5%	
Cross Regulation	Output 2:	5.0%	(Output 1 load
Output Noise	Output 3: Outputs 1-3	<u>2.0%</u> 1%	varied 50-100%)
Turn on Overshoot	None	1 /0	
Transient Response	Outputs 1 – 3		
Voltage Deviation	5.0%		
Recovery Time	1 mS		
Load Change	50% to 100%		
Output Overvoltage	Output 1:	110% to 1	50%
Protection (optional)	-		
Output Overcurrent Protection	Output 3:	110% Min.	
Output Overpower Protection	Outputs 1 & 2:	110% Min.	
	Outputs cycle on		
Hold Up Time	10 mS min., 25W	/ Output, 12	20V Input
Start Up Time	1 Second		
INPUT SPECIFICATIO		<u>c</u>	
Source Voltage	85 - 264 Volts A	L	
Frequency Range Source Current	47 – 63 Hz		
True RMS	.8A at 85V Input		
Peak Inrush	30 A		
Efficiency	.6672 (Varies	bv model)	
<b>ENVIRONMENTAL SP</b>			
Ambient Operating	0° C TO + 70° C		
Temperature Range	Derating: See Po	wer Rating	Chart
Ambient Storage Temp. Range	- 40° C to + 85°	С	
Temperature Coefficient	Outputs 1 – 3:	0.02%	6/°C
GENERAL SPECIFICA	TIONS		
Means of Protection			
Primary to Secondary	2MOPP (Means		
Primary to Ground			rotection) (1MOOP-Singles)
Secondary to Ground	Operational Insul	ation(Consi	ult factory for 1MOOP or 1MOPF
Dielectric Strength(8)			1.0
Reinforced Insulation	5656 VDC, Prima		
Basic Insulation Operational Insulation	2545 VDC, Primary to Ground, 1 Sec. 707 VDC, Secondary to Ground, 1 Sec.		
Leakage Current	IUI VDC, SECUI	uary to GIU	unu, I JCC.
Earth Leakage	<300uA NC, <10	00uA SEC	
Touch Current	<100uA NC, <50		
Mean-Time Between Failures			DBK-217F, 25° C, GB
Weight	0.30 Lbs. Ope	en Frame	
0	0.62 Lbs. Cha	assis and C	
ELECTROMAGNETIC			
Electrostatic Discharge	EN 61000-4-2		ntact Discharge
-		±8kV Air	Discharge
Radiated Electromagnetic Field	EN 61000-4-3		5GHz, 10/m, 80% AM
EFT/Bursts	EN 61000-4-4	±2 kV	
Surges	EN 61000-4-5	±1kV Diff	erential Mode
		±2 kV Co	mmon Mode
Conducted Immunity	EN 61000-4-6	.15 to 80M	/Hz, 3V, 80% AM
Voltage Dips and Interruptions	EN 61000-4-11	30% Red	uction, 500ms
			uction, 10ms
		60% Red	uction, 1s (Criteria B)
			uctions, 5000ms
Radiated Emissions	EN 55011/22	Class B	
Conducted Emissions	EN 55011/22	Class B	

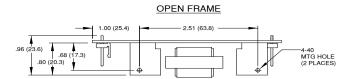
EN 55011/22

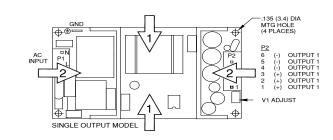
Class B

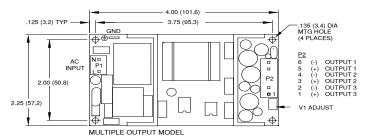
Conducted Emissions

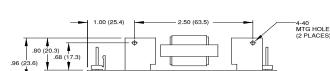


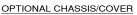
#### SRP-25 SERIES MECHANICAL SPECIFICATIONS

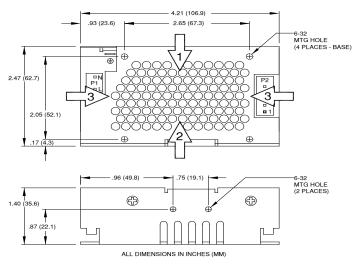








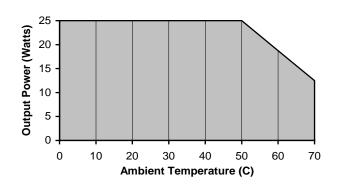




#### **APPLICATIONS INFORMATION**

- . Each output can deliver its rated current but total output power must not exceed 25 watts.
- 2. Semiconductor case temperatures must not exceed 110°C.
- 3. Sufficient area must be provided around convection cooled power supplies to allow natural movement of air to develop.
- 4. This product is intended for use as a professionally installed component within information technology and medical equipment.
- A minimum load of 10% is required on output one to ensure proper regulation of remaining outputs.
- This product includes only one fuse in the input circuit. In consideration of Clause 8.11.5 of IEC 60601-1:2005, a second fuse may be required in the end product.
- 7. Peak to peak output ripple and noise is measured directly at the output terminals of the power supply, without the use of the probe ground lead or retractable tip, 20 MHz bandwidth. This product includes only one fuse in the input circuit. In consideration of Clause 57.6 of UL 60601-1, a second fuse may be required in the end product.
- 8. This product was type tested and safely certified using the dielectric strength test voltages listed in Table 6 of IEC 60601-1:2005. In consideration of Clause 8.8.3, care must be taken to insure the voltage applied to a reinforced insulation does not overstress different types and levels of insulation. Primary and secondary to ground capacitors may need to be disconnected prior to performing a dielectric strength test on the power supply or the end product. It is highly recommended that the DC test voltages listed in DVB.1, Annex DVB of UL 60601-1 1<sup>st</sup> Edition are not exceeded during a production-line dielectric strength test of the assembled end product. Please consult factory for further information.
- This power supply has been safely approved and final tested using a DC dielectric strength test. Please consult factory before performing an AC dielectric strength test.
- 10. Maximum screw penetration into bottom chassis mounting holes is .100 inches.
- 11. Maximum screw penetration into side chassis mounting holes is .250 inches.
- To meet emissions specifications, all four mounting hole pads must be electrically connected to a common metal chassis. Chassis/cover option recommended.

#### MAXIMUM OUTPUT POWER VS. AMBIENT TEMPERATURE



CONNECTOR SPECIFICATIONS				
P1	AC Input	.156 friction lock header mates with Molex 09-50-3031 or equivalent crimp terminal housing with Molex 08-50-0189 or		
		equivalent crimp terminal.		
P2	DC Output	.156 friction lock header mates with Molex 09-50-3061 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.		
G	Ground	.187 quick disconnect terminal.		

### **RECOMMENDED AIR FLOW DIRECTION**

1 – Optimum 2 – Good 3 – Fair

