# **MINT1045**



45 W Single Output Series

Medical & ITE – Universal Input Power Supply

- •45 W Convection Cooled
- •Universal Input 80--270 Vac
- •Very Small Size: 2" W x 3" L x 1.0" H
- •88% Efficiency Typical
- •Class I or Class II AC Input Applications
- •CSA/EN/IEC/UL60601-1 3<sup>rd</sup> Edition for Medical, BF Rated (2 MOPP), Ultra-low Leakage Current
- •CSA/EN/IEC/UL60950-1 2<sup>nd</sup> Edition for ITE

### International Safety Standard Approvals

# 





**3 Year Warranty** 

<b>Specification</b>	S All Specifi	cations are typical at nominal in	out, full load at 25°C unless otherwise stated.
AC Input	100-240Vac +/- 10%, 47-63 Hz 1Ø rated 80-270 Vac, 47-440 Hz operational	Turn On Time	500 ms max at 120 Vac
Input Current	0.75A @ 120 Vac, 0.45 A @ 240 Vac	Hold-up Time 25	ms minimum at 45 W, nominal input (120Vac)
Inrush Current	Average over half cycle 37A max., 264 Vac	<b>Overvoltage Protection</b>	110-160%, auto-reset
Input Fuses	F1, F2: 1.6A, 250Vac fuses provided internally	<b>Overload Protection</b>	Hiccup Mode, 58W typical
Power Factor	Complies with EN61000-3-2, Class A	<b>Short Circuit Protection</b>	Hiccup Mode, 58W typical
Efficiency	88% typical	<b>Overtemperature Protect</b>	tion Self-Recovering
Output Power 45	W continuous. See chart for operation above 50°C	Medical Safety Standard Methods Of	s CSA/EN/IEC/UL 60601-1, 3 <sup>rd</sup> Edition Protection: 2 MOPP for Type BF Applications
Peak Output Power	50 W for 1 minute, 10% duty cycle	ITE Safety Standards Set	CSA/EN/IEC/UL 60950-1, IEC 2 <sup>nd</sup> Edition e page 2 for detailed safety agency standards
Ripple and Noise Measure	1% pk-pk max., 20 MHz BW, differential mode d with noise probe directly across output terminals	Isolation In	put-Output: 4500Vac, Input-Ground: 1900Vac Output-Ground: 1900Vac
Output Voltage	See chart	Leakage Current 1	2V-28V models: 120Vac: 30μA NC/70μA SFC 264Vac: 75μA NC/130μA SFC 48V model: 120Vac: 90μA NC/120μA SFC 264Vac: 200μA NC/300μA SFC
Voltage Adjustability	Not adjustable Factory set with fixed resistors for higher reliability	Operating Temperature	-20° to 70°C See derating chart
Minimum Load	Not required	Output Power Derating	Derate output power by 2.5% per °C above 50°C, up to 70°C max
Total Regulation	See chart	Storage Temperature	-40 to +85°C
Transient Response	500µs max. to 1%, 50% load step 0.2A/µs, 3.5% deviation. typical	Relative Humidity	5% to 95%, non-condensing
Switching Frequency	Fixed 65 kHz, typical	MTBF	300K hours per Telcordia

#### 

# **MINT1045**



### 45 W Single Output Series

### Medical & ITE – Universal Input Power Supply

## 3 Year Warranty

Output Parameters						
Model Number	Volts	Output Current	Ripple & Noise	Total Regulation	Initial Set-point Tolerance	
MINT1045A1275K01	12 V	3.75	120mV	±0.5%	±2%	
MINT1045A1575K01	15 V	3.00	150mV	±0.5%	±2%	
MINT1045A2475K01	24 V	1.90	240mV	±0.5%	±2%	
MINT1045A2875K01	28 V	1.60	280mV	±0.5%	±2%	Only class I input

Notes:

1. Derate output power by 2% per volt AC for input voltage <90Vac.

Specifications (continued)						
Vibration	Random vibration per MIL-STD-810E, Method 514.4, Cat. 1, Figure 514.4-1, 1 hr in each of three axes		Half-sine, 40 gpk, 10 msec duration, +/- in each of three axes, total of 6 shocks			
Enclosure Dimensi	ons See outline drawing	Operating Altitude	-500 to 10,000 ft			
Weight	113 grams	Non-operating Altitude	-500 to 40,000 ft			

EMI/EMC Compliance		
Conducted Emissions	EN55011/22 Class B, FCC Part 15, Class B, 3db margin	
Radiated Emissions	EN55011/22 Class A, FCC Part 15, Class A,	
Static Discharge Immunity	EN61000-4-2, 6kV Contact Discharge, 8kV air discharge	
Radiated RF Immunity	EN61000-4-3, 3V/m.	
EFT/Burst Immunity	EN61000-4-4, 2kV/5kHz.	
Line Surge Immunity	EN61000-4-5, 1kV differential, 2kV common-mode	
Conducted RF Immunity	EN61000-4-6, 3Vrms	
Power Frequency Magnetic Field Immunity Convection Cooled	EN61000-4-8, 3A/m	
Voltage Dip Immunity	EN61000-4-11 100Vac, 95% dip/0.5 cycle (Criteria A), 60%/5cycles (Criteria A at 30% load), 30%/25 cycles (Criteria A).	
Line Frequency Harmonics	Complies with EN61000-3-2, EN60601-2-1	

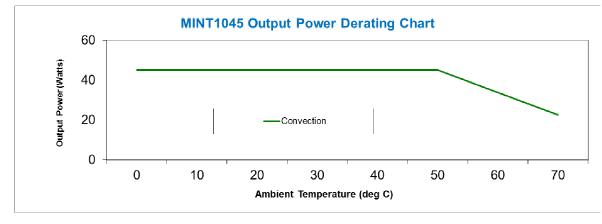
#### Safety Agency Compliance

Medical Certification to the New 3rd Edition:

- Demko certified to EN 60601-1:2005, 3rd Ed.
- Demko certified to EN 60601-1:2005, 3rd Ed.
  CB certified to IEC 60601-1:2005, 3rd Edition

#### ITE Certification to the New 2nd Edition:

- Demko certified to EN60950-1:2006+ A11:2009,2nd Ed.
- CB certified to IEC 60950-1:2005, 2nd Edition
- UL Recognized to ANSI AAMI ES60601-1:2005 & CAN/CSA C22.2, No. 60601-1-08
- UL Recognized to UL 60950-1:2007, 2nd Edition & CAN/CSA C22.2, No. 60950-1-07, 2nd Edition



#### SL Power Electronics Corp • 6050 King Drive Ventura, CA 93003 • Phone 805.486.4565 • Fax 858.712.2040 • Email: info@slpower.com • www.slpower.com

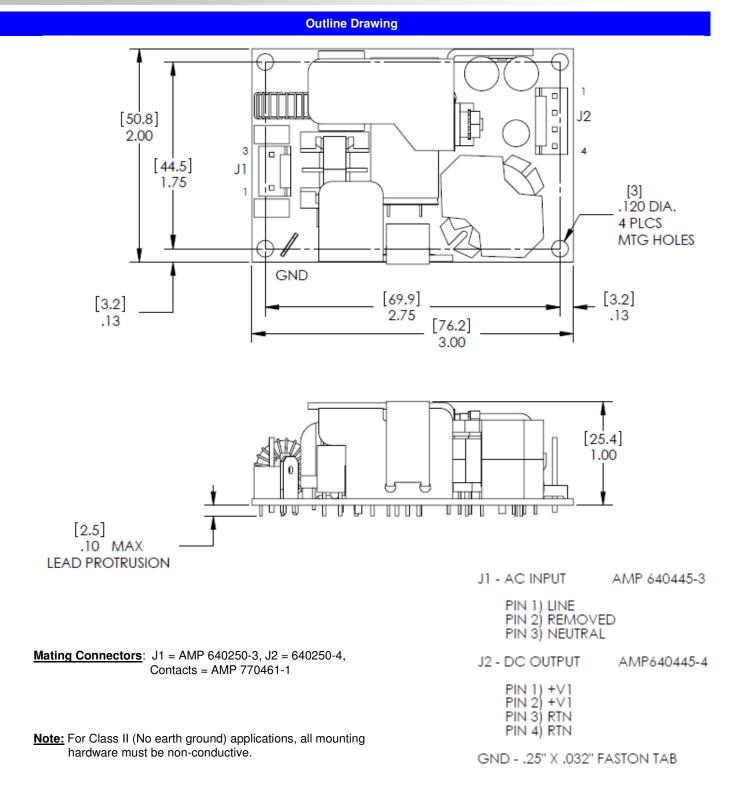
# **MINT1045**

45 W Single Output Series

Medical & ITE – Universal Input Power Supply



**3 Year Warranty** 



Data Sheet © 2015 SL Power Electronics Corp. The information and specifications contained herein are believed to be correct at the time of publication. Rev. 2-26-2015 However, SL Power accepts no responsibility for consequences arising from reproduction errors or inaccuracies. Specifications are subject to change without notice.

3 of 3