



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



30 Watts

PDM30 Series



- CEC2008 & EISA2007 Compliant ≥ 9 V
- Worldwide Medical Approvals
- Class II Construction
- Single Outputs from 5 V to 24 V
- High Efficiency
- Operation to $+60$ °C
- 3 Year Warranty

Specification

Input

Input Voltage	• 80-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 0.6 A rms max
Inrush Current	• 50 A max at 264 VAC, cold start 25 °C
Power Factor	• Meets EN61000-3-2, Class A
Input Protection	• Fitted with a T2 A/250 VAC fuse in live line

Output

Output Voltage	• See table
Initial Set Accuracy	• $\pm 2\%$ set at 60% load
Minimum Load	• No minimum load required
Start Up Delay	• 3 s max
Start Up Rise Time	• 2 ms
Hold Up Time	• 16 ms typical at 115 VAC
Line Regulation	• $\pm 1\%$
Load Regulation	• See tables
Transient Response	• 5% max deviation recovering to within 1% within 500 μ s for 50% load change
Ripple & Noise	• 1% max, 20 MHz bandwidth see note 1
Oversvoltage Protection	• See table
Overload Protection	• 120-150%
Short Circuit Protection	• Trip & restart (hiccup mode), auto-recovery
Temperature Coefficient	• $\pm 0.05\%/^{\circ}\text{C}$

General

Efficiency	• 82% minimum
Isolation	• 4000 VAC Input to Output, 2 x MOPP
Switching Frequency	• 70 kHz typical
Power Density	• 3 W/Inch ³
MTBF	• 300 kHrs to MIL-HDBK-217 at 25 °C, GB

Environmental

Operating Temperature	• 0 °C to $+60$ °C (see derating curves)
Cooling	• Convection-cooled
Operating Humidity	• 5-95% non-condensing
Storage Temperature	• -20 °C to $+85$ °C
Operating Altitude	• 3000 m
Vibration	• 5-500 Hz at 3 g for 10 mins on each axis
Shock	• 30 g with 18 ms half sine wave, 3 times on each axis

EMC & Safety

Emissions	• EN55011 Level B conducted & radiated
Harmonic Currents	• EN61000-3-2, Class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2 Level 3, Perf Criteria A
Radiated Immunity	• EN61000-4-3 Level 2, Perf Criteria A
EFT/Burst	• EN61000-4-4, Level 3, Perf Criteria A
Surge	• EN61000-4-5 Level 3, Perf Criteria A
Conducted Immunity	• EN61000-4-6 Level 3, Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 70% U_T for 500 ms, 40% U_T for 100 ms, $<5\%$ U_T for 5000 ms Perf criteria A, B, B
Safety Approvals	• UL60601-1, EN60601-1, IEC60601-1, CE Mark

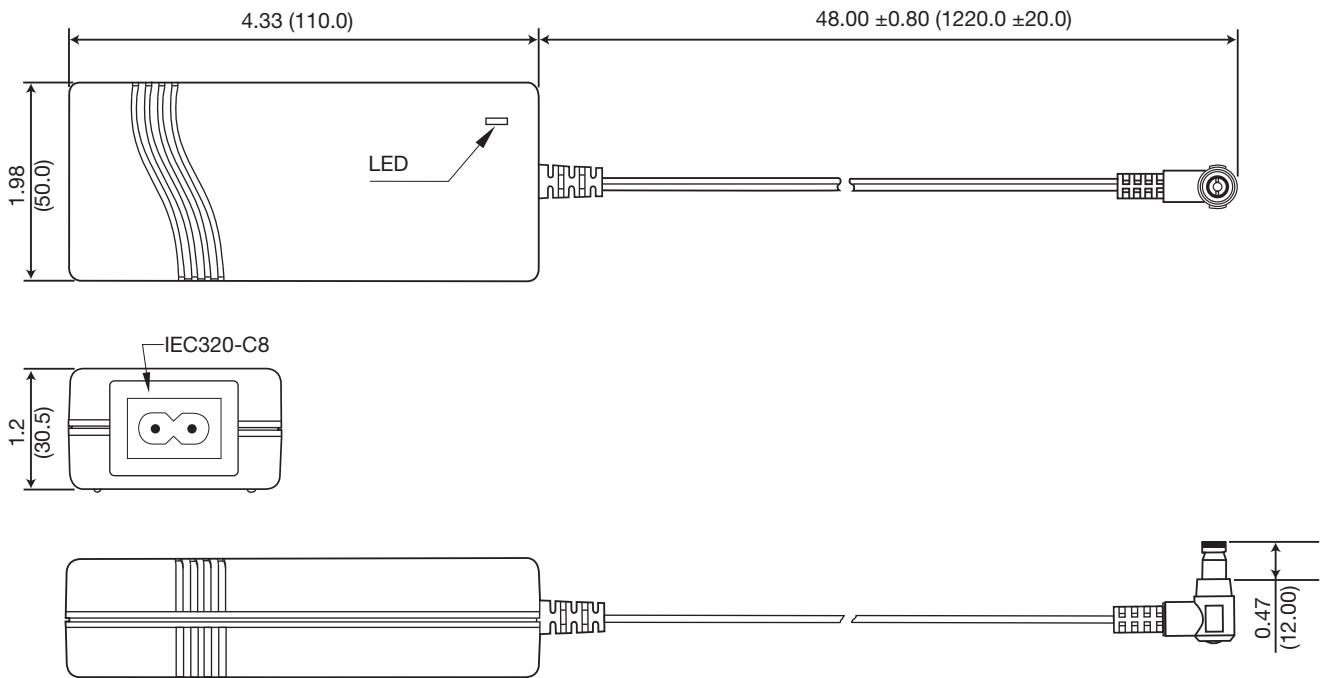
Models and Ratings

Output Voltage	Output Current	OVP Range	Efficiency	Regulation		Model Number
				Line ⁽²⁾	Load ⁽³⁾	
5 V	4.00 A	6.45-7.14 V	74%	±1%	±6%	PDM30US05
9 V	3.00 A	10.5-11.6 V	81%	±1%	±4%	PDM30US09
12 V	2.50 A	14.3-15.8 V	82%	±1%	±3%	PDM30US12
15 V	2.00 A	17.1-18.9 V	83%	±1%	±3%	PDM30US15
18 V	1.65 A	20.9-23.1 V	83%	±1%	±2%	PDM30US18
24 V	1.25 A	25.7-28.4 V	83%	±1%	±2%	PDM30US24

Notes

1. Ripple and Noise is measured using a 0.1 μF ceramic and 10 μF electrolytic capacitor, 20 MHz bandwidth.
2. Line regulation is measured from 100 VAC to 240 VAC with full load.
3. Load regulation is measured from 20% to 100% full load (60% ±40% full load).

Mechanical Details



Output connector is right angle jack 0.22 x 0.10 x 0.47 (5.5 x 2.5 x 12.0), center positive.
 Weight: 0.49 lbs (220 g). Case tolerance: ±0.02 (±0.5)
 All dimensions in inches (mm).

Derating Curves

