



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





MSM28 Series

28W Medical Open Frame Power Supply

- 5-Year Limited Warranty
- High Efficiency
- Wide Range AC Input
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time > 15ms at full load
- Output Floating
- Safety Approval- EN60601-1 Class I

Elpac Part Number	Output Voltage	Output Current ¹	Total Regulation ²	Typical Efficiency ³
MSM2812	12.0V	2.30A	±5%	80%
MSM2824	24.0V	1.20A	±5%	80%

Notes

1 Maximum peak load (33W) lasting 500ms with a maximum 10% duty cycle.

2 Includes initial setting, line regulation, load regulation, and thermal drift.

3 Typical at 115VAC at full load.

Input

Input Voltage	85 - 264VAC; 100 - 240VAC Nominal
Input Frequency	50 - 60Hz
Input Current	<0.55A rms
Inrush Current	<37A at 230VAC cold start
Zero Load Power Consumption	<2.6W
Earth Leakage Current (Typical)	<70µA @ 132VAC @ 60Hz <140µA @ 264VAC @ 60Hz

Output

Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<750ms
Hold-Up Time	>15ms
Ripple & Noise	<1% pk-pk ** *
Over Voltage Protection	113-135%
Over Temperature Protection	Active - Recoverable
Over Current Protection	120 - 180%
Short Circuit Protection	shutdown, auto-restart (hiccup mode)

Notes

* Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.


General

Efficiency	Avg Efficiency 81.7% @ 115VAC; 82.1% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	3.75" x 2.60" x 1.00" 45.3mm x 66.15mm x 25.4mm
Weight	0.30 lbs (0.14 kg)
Power Density	2.7W/in ³

Environmental

Operating Temperature	0 – 50°C (Full load to 50°C, derate linearly to 50% load at 70°C)
Storage Temperature	-40°C to +85°C
Relative Humidity	5-95%, non-condensing
Cooling	Natural Convection
Vibration	All units production tested to 19.6m/s ²

EMC & Safety

Emissions	FCC class B, CISPR11 class B, EN61000-3-2, -3
Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11
Certified by UL to the following:	UR/cUR
	UL 60601-1
	CAN/CSA-22.2 No.601.1-M90
	CB per IEC60601-1
	CE marked to LVD

Input Configuration

Connector (P1)	AMP p/n 640445-5
Mating Connector	AMP p/n 640250-5

Output Configuration

Connector (P2)	AMP p/n 640445-4
Mating Connector	AMP p/n 640250-4
Mating Connector Contacts	AMP p/n 770476

Input Pin Assignments (CN1)

Pin 1	Earth Ground
Pin 2	<not assembled>
Pin 3	Ac Neutral
Pin 4	<not assembled>
Pin 5	AC Line

Output Pin Assignments (CN2)

Pin 1	Com
Pin 2	Com
Pin 3	+V1
Pin 4	+V1

