



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

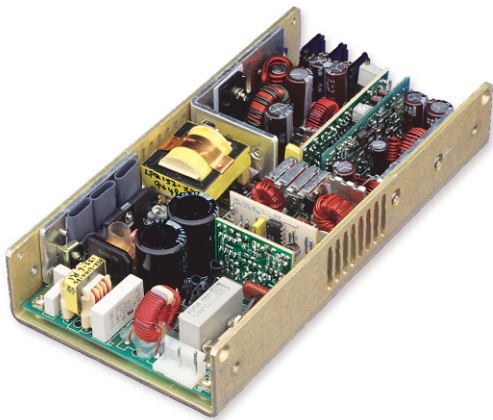
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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



150 Watts LPQ150 Series

Total Power: 110-150 Watts
Input Voltage: 85-132 / 170-264 VAC
 220-300 VDC
of Outputs: Quad



Special Features

- Auto ranging input
- Remote sense on main output
- Remote inhibit
- Single wire current sharing
- Power fail
- Built-in EMI filter
- Low output ripple
- 135 khz switching frequency
- Overvoltage protection
- Overload protection
- Adjustable floating 4th output (On LPQ152 and LPQ153 models)
- Optional cover (-C suffix). See page 64.

Environmental

Operating temperature: 0° to 50°C ambient derate each output at 2.5%/per degree from 50° to 70°C

Electromagnetic susceptibility: designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ± .04%/per °C

MTBF demonstrated: >550,000 hours at full load and 25°C ambient condition

Electrical Specs

Input

Input range	85-132 VAC or 170-264 VAC automatically selected. 220-300 VDC
Frequency	47-63 Hz
Inrush current	38 A max, cold start @25°C
Efficiency	75% typical at full load
EMI filter	Meets FCC Class B conducted CISPR 22 Class B conducted EN55022 Class B conducted VDE0878 PT3 Class B conducted
Safety ground leakage current	0.5 mA @50/60 Hz, 264 VAC input

Output

Maximum power	110 W convection (75 W with cover) 150 W with 30 CFM forced air (130 W with cover)
Adjustment range	±5% on main; 5-25 V on 4th output on LPQ 152 & LPQ 153
Cross regulation	±2% on output 1; ±3% on outputs 2, 3 & 4
Hold-up time	20 ms @110 W load at nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @110-145% above peak rating
Overvoltage protection	5.7-6.7 VDC on main output

Logic Control

Power failure	TTL logic signal goes high 50-150 msec after 5 V output. It goes low at least 3 msec before loss of regulation
Remote inhibit	Requires an external TTL high signal to inhibit outputs
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

Safety

VDE	0805/EN60950 (IEC950)	11774-3336-1260 (LC# 88585)
UL	UL1950	EI32002
CSA	CSA 22.2-234 Level 3	LR53982
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P95102999
CB	Certificate and report	2061
CE	Mark (LVD)	

rev 12.10.03

Technical Support: (888) 41-ASTEC or (407) 241-2752

Americas: (760) 930-4600

Europe (UK) 44 (1384) 842-211

Asia (HK) 852-2437-9662



AMERICAS

5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX, UK
Telephone: 44 (1384) 842-211
Facsimile: 44 (1384) 843-355

ASIA

Units 2111-2116, Level 21
Tower 1, Metroplaza
223, Hing Fong Road
Fwai Fong, New Territories
Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426



Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PARD) ³
LPQ152	5 V	2 A	15 A	22 A	30 A	±2%	50 mV
	12 V	.1 A	6 A	8 A	10 A	±3%	120 mV
	-12 V	.1 A	2 A	2.5 A	3 A	±3%	120 mV
	±5-25 V	0 A	2.5 A	3 A	3 A	±3%	240 mV, max.
LPQ153	5 V	2 A	15 A	22 A	30 A	±2%	50 mV
	15 V	.1 A	4.8 A	6.4 A	8 A	±3%	150 mV
	-15 V	.1 A	1.6 A	2 A	2.4 A	±3%	150 mV
	±5-25 V	0 A	2.5 A	3 A	3 A	±3%	240 mV, max.
LPQ154	5 V	2 A	15 A	22 A	30 A	±2%	50 mV
	12 V	.1 A	6 A	8 A	10 A	±3%	120 mV
	-12 V	.1 A	2 A	2.5 A	3 A	±3%	120 mV
	24 V	.5 A	3.5 A	4.5 A	5 A	+10 / -5%	240 mV

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 μF in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
4. 4th output adjustable 5-25 V factory set at 5 V.
5. Minimum loads are required.

Note: -C suffix added to the model number indicates cover option.

Pin Assignments

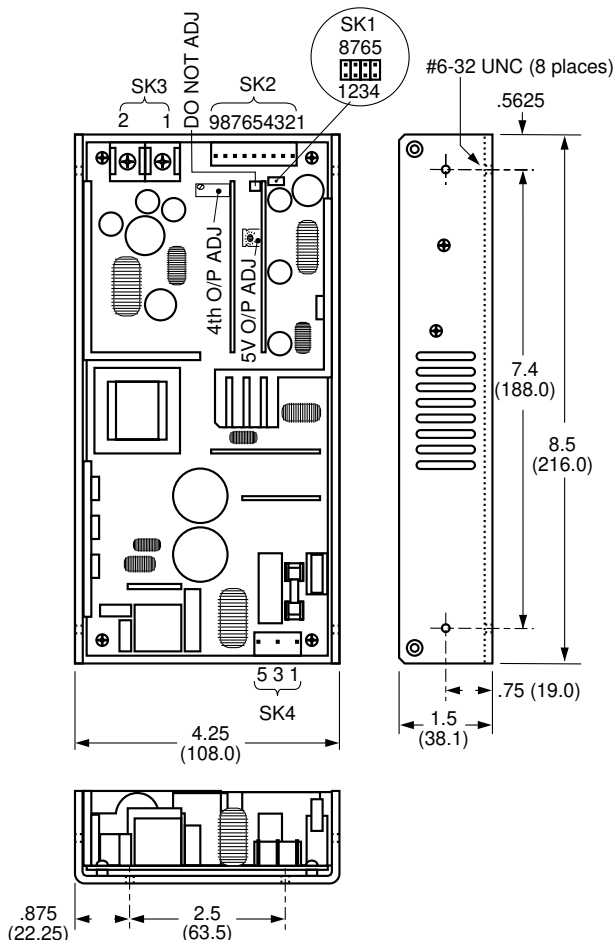
Connector	LPQ152	LPQ153	LPQ154
SK1	PIN 1 INHIBIT -ve	INHIBIT -ve	INHIBIT -ve
	PIN 2 INHIBIT +ve	INHIBIT +ve	INHIBIT +ve
	PIN 3 +12 V	+15 V	+12 V
	PIN 4 No Connection	No Connection	No Connection
	PIN 5 COMMON	COMMON	COMMON
	PIN 6 -SENSE	-SENSE	-SENSE
	PIN 7 +SENSE	+SENSE	+SENSE
	PIN 8 I SHARE	I SHARE	I SHARE
SK2	PIN 1,2 +12 V	+15 V	+12 V
	PIN 3,4,5 COMMON	COMMON	COMMON
	PIN 6 -12 V	-15 V	-12 V
	PIN 7 POK	POK	POK
	PIN 8 +5 V to +25 V (Float)	+5 V to +25 V (Float)	+24 V
	PIN 9 COMMON (Float)	COMMON (Float)	COMMON
SK3	TB-1 COMMON	COMMON	COMMON
	TB-2 +5 V	+5 V	+5 V
SK4	PIN 1 GROUND	GROUND	GROUND
	PIN 3 LINE	LINE	LINE
	PIN 5 NEUTRAL	NEUTRAL	NEUTRAL

Mating Connectors

- (SK4) AC Input: Molex 09-50-8051 (USA)
Molex 09-91-0500 (UK)
PINS: 08-58-0111
- (SK2) Aux DC Output/Power fail: Molex 09-50-8091 (USA)
Molex 09-91-0900 (UK)
PINS: 08-58-0111
- (SK1) Remote sense/Remote inhibit: Molex 51110-0851 (USA)
PINS: 503-94-8100

Notes

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±0.02".
3. Specifications are for convection rating at factory settings unless otherwise stated.
4. Remote inhibit requires an external 5V @ 10mA to activate.
5. Mounting (6-32) maximum insertion depth is 0.12".
6. Warranty: 2 year
7. Weight: 1.75 lb. / 0.80 kg



Astec Connector Kit #70-841-010, includes al of the above.