# imall

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

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# 70-120 Watts NTQ123 Series



#### **Special Features**

- Active power factor correction
- EN61000-3-2 compliance
- Remote sense on outputs one and two
- Power fail and remote inhibit
- Single wire current sharing on outputs one and two
- Adjustable main outputs
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection

#### **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 EN61000-4, -2, -3, -4, -5, -6, -8, -11 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 0.7 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ± .04% per °C

MTBF demonstrated: >1 million hours at full load and 25°C ambient conditions

#### **Electrical Specs**

70-120 Watts

Input Input range Frequency Inrush current Efficiency

EMI filter

Total Power:

Input Voltage: 85-264 VAC # of Outputs: Quad

> Power factor Safety ground leakage current

Output Maximum power

Adjustment range Hold-up time Overload protection

Overvoltage protection

## Logic Control

Power failure

Remote inhibit

85-264 VAC 47-63 Hz 38 A max., cold start @ 25°C 65% typical at full load FCC Class B conducted and radiated, CISPR 22 Class B conducted and radiated, EN55022 Class B conducted and radiated, VDE 0878 PT3 Class B conducted and radiated. 0.99 typical

<1 mA @ 50/60 Hz, 264 VAC input

70 W convection, 120 W with 30 CFM forced air ±5% minimum on outputs one and two 20 ms @ 120 W load, 120 VAC input Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating 3.3 V and 5 V output: 20% to 35% above nominal output

TTL logic signal goes high 100-500 msec after 5 V output; it goes low at least 4 msec before loss of regulation Requires an external TTL Signal to inhibit outputs Compensates for 0.5 V lead drop minimum, will operate without remote sense connected. Reverse connection protection.

	Safety	
VDE UL CSA NEMKO BABT CB	0805/EN60950 (IEC950) UL1950 CSA 22.2-234 Level 3 LR109 EN 60950/EMKO-TUE P9810 (74-sec) 203 EN60950/EN41003 Certificate and report	
CE	Mark (LVD)	5005



Remote sense

#### 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 Kwai Fong, New Territories Hong Kong Telephone: 852-2402-4426 Facsimile: 852-2402-4426 ASTEC

### **Ordering Information**

Model Number	Output Voltage	Minimum Load⁴	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load¹	Regulation <sup>2</sup>	Ripple P/P (PARD)³
NTQ123	+3.3 V	0 A	14 A	25 A	28 A	±2%	50 mV
	+5 V	2 A	12.5 A	24 A	28 A	±2%	50 mV
	+12 V	0 A	1 A	2 A	4 A	±3%	120 mV
	-12 V	0 A	0.5 A	1 A	1.5 A	±3%	120 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  $10 \,\mu\text{F}$  in parallel with a 0.1  $\mu\text{F}$  capacitor at rated line voltage and load ranges.

4. Minimum loads are required. In parallel minimum loads are 2.5 A on the 5 V output and 1 A on the 3.3 V output for each power supply.

	Pi	n Assignments	
Conne	ctor		EVC.
SK1	PIN 1 PIN 3 PIN 5	Ground Neutral Live	M 3.5 (3 places) MAIN OUTPUTS (3 places) MAIN OUTPUTS (3 places) (3 places) (3 places) (3 places) (4 places) (5 places) (5 places) (5 places) (5 places) (6 places) (7 plac
SK5	PIN 1 PIN 2 PIN 3	+12 V Common -12 V	
	PIN 1 PIN 2 PIN 3 PIN 4 PIN 5 PIN 6 PIN 7 PIN 8 PIN 9 PIN 10 Connectors C Input:	3.3 V SWP -3.3 V Sense +3.3 V + Sense 5 V SWP COMMON +5 V Sense -5 V Sense + Inhibit - Inhibit Power Fail Molex: 09-50-8051 (USA)	
SK2,3,4	·	Molex: 09-91-0500 (UK) PINS: 08-58-0111 Molex series 19141-0058/0063 60-8031 (USA) Molex: 09-91-0300 (UK)	
<b>(</b> SK6) C	Control Signals:	PINS: 08-58-0111 Molex: 90142-0010 PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8	531
Notes:			
2. All o 3. Ren to a	dimensions in in note inhibit requ activate	ches (mm), tolerance $\pm .02^{\circ}$ . uires an external 5 V @ 10 mA n insertion depth is 0.12°.	(63.5)

# NTQ123 Series



5. Warranty: 1 year
6. Weight: 1.38 lb. / .63 kg