



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.

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NTQ123-DC Series

70 - 125 Watts

Total Power: 70-120 Watts
Input Voltage: 36 - 72 VAC
of Outputs: Quad



Special Features

- -48 VDC input
- 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

Safety

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

Electrical Specifications

Input

Input range	36 - 72 VDC
Inrush current	38 A max., cold start @ 25°C
Efficiency	65% typical at full load
EMI filter	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted; VDE 0878 PT3 class B conducted and radiated.
Safety ground leakage current	<1 mA @ 72 Vdc input

Output

Maximum power	70 W for convection; 125 W with 30 CFM forced air
Adjustment range	±5% minimum
Hold-up time	20ms @ 120 W load, -48 Vdc input
Overload protection	Short circuit protection on all outputs Case overload protected @ 110-145% above peak rating
Overvoltage protection	3.3 V output; 5 V output: 10% to 35% above nominal output

Logic Control

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



Environmental Specifications

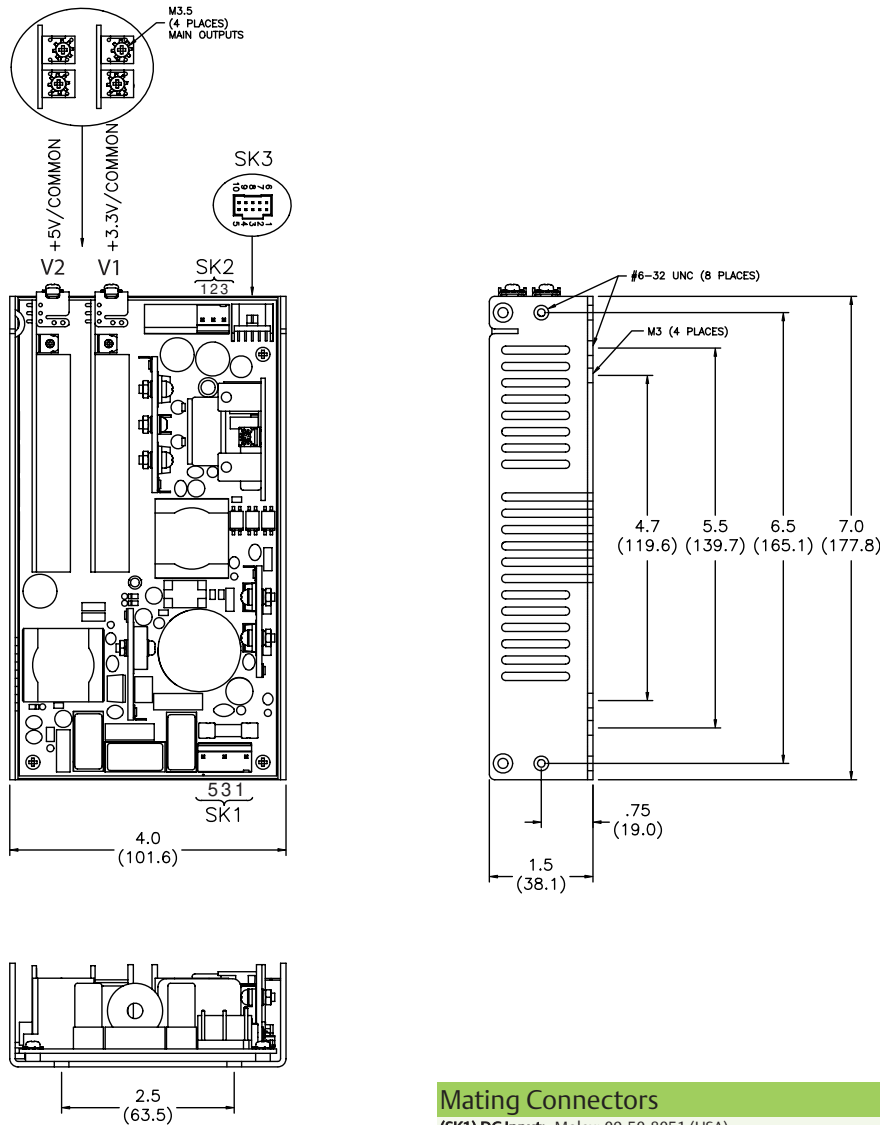
Operating temperature:	0° to 50°C ambient. Derate each output 2.5% per degree from 50° to 70°C
Storage temperature:	-40°C to +85°C
Temperature coefficient:	±0.4% per °C
Electromagnetic susceptibility:	Designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 5% to 95% RH
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
MTBF demonstrated:	>1 million hours at full load and 25°C ambient conditions

Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PARD) ³
NTQ123-DC	+3.3 V (2.5 - 5.7)	2 A	14 A	25 A	28 A	±2%	50 mV
	+5 V (2.5 - 5.7)	0 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%	120mV

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. Minimum loads are required. In parallel minimum loads are 2 A on the 5 V output and 2 A on the 3.3 V output for each power supply

Mechanical Drawing



Pin Assignments

SK1	PIN 1	Ground
	PIN 3	-48 Vdc
	PIN 5	Return
SK2	PIN 1	+12 V
	PIN 2	Common
	PIN 3	-12 V
SK3	PIN 1	3.3 V SWP
	PIN 2	-3.3 V sense
	PIN 3	+3.3 V +sense
	PIN 4	5 V SWP
	PIN 5	Common
	PIN 6	+5 V ssense
	PIN 7	-5 V sense
	PIN 8	+ inhibit
	PIN 9	- inhibit
	PIN 10	Power fail

Mating Connectors

(SK1) DC Input: Molex: 09-50-8051 (USA)
Molex: 09-91-0500 (UK)
PINS: 08-58-0111

V1 & V2: Molex BB-124-08

(SK2) ±12 V Molex:09-50-8031 (USA)
Molex: 09-91-0300 (UK)
PINS: 08-58-0111

(SK3) Control Signals: Molex: 90142-0010
PINS: 90119-2110
or
Amp: 87977-3
PINS: 87309-8

Astec Connector Kit #70-841-012, includes all of the above

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is $\pm 0.02^*$ (± 0.5 mm)
3. Remote inhibit requires an external 5 V @ 10 mA to activate
4. Mounting maximum insertion depth is 0.12"
5. Warranty: 2 year
6. 1.49 lb./ 0.68 kg

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