



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!



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5 V output

PULS

SLD2.100

- DC/DC converter for the SilverLine
- Input: DC 18...36 V
- Output: 5.1 V / 8 A
- MOSFET inverse battery protection
- Active in-rush current limiting



CE
EMC and
Low Volt.
Directive

Data sheet

Input

| | |
|----------------------------|--|
| Inpt voltage | 18...36 VDC, short term 16...40 V DC (min. 18 V for start) |
| Inverse battery protection | via low-loss MOSFET, no fuse replacement necessary |
| Input current | < 2.9 A (at Vin=18 V, nominal load) < 1.5 A (at Vin=36 V, nominal load) |
| In-rush current | typ. 19 mA (preserves battery sources) typ. < 5.1 A |
| Inrush current limiting | done with a fixed 4.7R resistor (not a thermistor) which is bridged after the unit is running, so losses are minimised. That means no reset time even at a warm-start. |
| Hold-up time | > 10 ms at Vin=24 VDC, Vout=5.1 V/8 A |

Efficiency, Reliability etc.*

| | |
|---------------------------|---|
| Efficiency | typ. 82 % (24 VDC, 5.1 V/8 A) |
| Losses | typ. 8.5 W (24 VDC, 5.1 V/8 A) |
| MTBF | 510.000 h acc. to Siemensnorm 29500 (5.1 V/8 A, 24 VDC, T _U = +40 °C) |
| Electrolytics (lifecycle) | The unit exclusively uses longlife electrolytics, specified for +105°C (cf. 'The SilverLine', p.2). |

Start / Overload Behaviour

| | |
|--------------------|--|
| Startup delay | typ. 0.3 s |
| Overload Behaviour | Almost straight charact., see diagram overleaf |

Construction / Mechanics*

| | |
|-------------------------------|---|
| Housing dimensions and Weight | |
| • W x H x D | 49 mm x 124 mm x 102 mm (+ DIN rail) |
| • Free space for ventilation | above/below 25 mm recommended right 10 mm recommended (front view) |
| • Weight | 470 g |

Design advantages:

- All connection blocks are easy to reach as mounted at the front panel.
- Input and output are strictly apart from each other and so cannot be mixed up (Input below, output above).

Output

| | |
|--|--|
| Output voltage | 5.1 V DC ± 1%, adjustable 4.5 ... 5.5 V (at front panel) |
| Ambient temperature range T _{amb} | Operation: 0°C...+70°C (>60°C: Derating) Storage: -25°C...+85°C |
| Continuous loading | 8 A (at T _{amb} =0°C ... 60°C, convection cooling) |
| Derating | typ. 1.5 W/K (at T _{amb} =+60°C...+70°C) |
| Voltage regulation | better than 1% Vout overall |
| Ripple / Noise | < 50 mV _{pp} , incl. spikes (20 MHz bandwidth, 50 Ω measur.) |
| Overvolt. protection | typ. 6 V |
| Parallel operation | yes |
| Power back immunity | 10 V |
| Front panel indicator | Green LED |

Electromagnetic Compatibility (EMC)

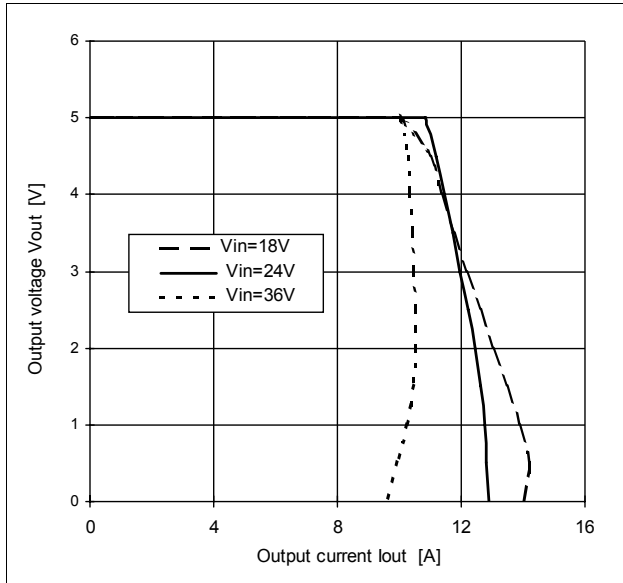
| | |
|-----------------------------------|--|
| Emissions | Class B (EN 55011, EN 55022) radiated noise Class A (EN 55011, EN 55022) line-bound noise |
| Immunity | EN 61000-6-2 (includes EN 61000-6-1) |
| • Static Discharge (ESD) | EN 61000-4-2, Level 4 (withstands 8 kV direct discharge, 15 kV air discharge) |
| • Electromagnetic radiated fields | EN 61000-4-3, Level 3 (10 V/m) |
| • Burst, coupled to: | EN 61000-4-4, |
| – DCin lines | Level 3 (2 kV) |
| – DCout lines | Level 3 (2 kV) |
| • Surge transients | EN 61000-4-5, |
| – Differential (±Vin → PE) | Isolation class 3 (2 kV) |
| – Common mode (+Vin → -Vin) | Isolation class 3 (1 kV) |
| • Conducted noise immunity | EN 61000-4-6, Level 3 (10V, 150 kHz-80 MHz) |

* For further information see data sheets „The SilverLine“ and „SilverLine Family Branches“

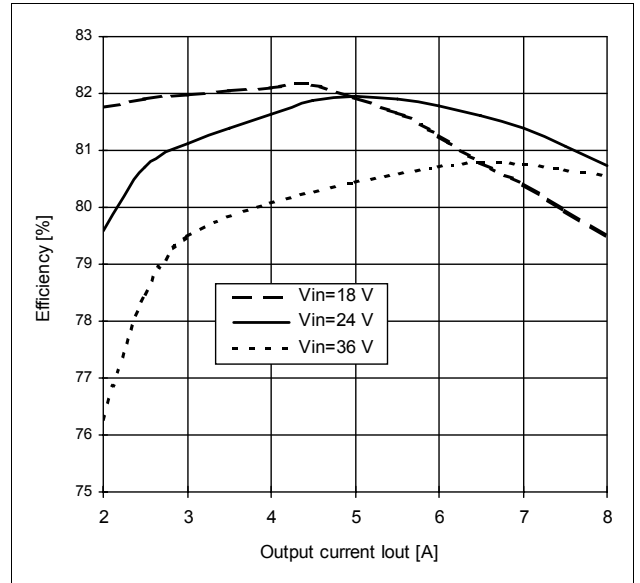
Order information

| Order number | Description |
|--------------|--------------------|
| SLD2.100 | |
| SLZ02 | Screw mounting set |

V/I Output characteristic (typ.)



Efficiency (typ.)



Unless otherwise stated, specifications are valid for AC 230V input voltage, +25°C ambient temperature, and 5 min. run-in time. They are subject to change without prior notice.

Your partner in power supply:



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