



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!



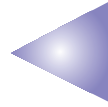
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MT10

10 WATT DC/DC CONVERTER, SINGLE & MULTIPLE OUTPUTS



FEATURES

- ▶ **RATED 15W AT 24VDC & 48VDC INPUT**
- ▶ **SINGLE AND DUAL OUTPUTS**
- ▶ **HIGH EFFICIENCY AND RELIABILITY**
- ▶ **HIGH I/O ISOLATION 1500VDC**
- ▶ **INTERNAL EMI FILTER**
- ▶ **LOW OUTPUT RIPPLE AND NOISE**
- ▶ **SHORT CIRCUIT PROTECTION**
- ▶ **DIRECT PCB-SOLDERING**
- ▶ **INDUSTRY STANDARD PINOUT (IC-24P)**
- ▶ **LOW PROFILE, 10mm (0.39") HEIGHT**
- ▶ **TWO YEAR WARRANTY**

EMI

Complys with: **CISPR CLASS A**

ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load

INPUT SPECIFICATIONS

| | |
|---------------------------|---------------------|
| Input Voltage Range | 9-18 VDC MT10 - 12 |
| | 18-36 VDC MT10 - 24 |
| | 36-72 VDC MT10 - 48 |

OUTPUT SPECIFICATIONS

| | |
|------------------------------|---------------------------------------|
| Output Voltage Accuracy..... | ±0.5% |
| Over-Current Protection..... | Built-in |
| Ripple Noise | 150 mVp-p (DC to 20MHZ) |
| Line Regulation..... | ±0.5% max. |
| | ±10% max. (MT10 - **03S) |
| Line Filter..... | Built-in |
| Load Regulation..... | ±1.0% max. (min-max load) MT10 Single |
| | ±3.0% max. (min-max load) MT10 Dual |
| | ±5.0% max. (min-max load) MT10***03S |

GENERAL SPECIFICATIONS

| | |
|-------------------------------|---|
| Isolation Voltage | |
| Input-Output..... | DC 1500V/ 1min. MT10-48 |
| Input-Output..... | DC 750V/ 1min. MT10-12, MT10-24 |
| MTBF..... | >1.2 million hours |
| Isolation Resistance..... | Input-Output-Case1000M-ohms max. (Measured at 500 VDC) |
| Short-Circuit Protection..... | 20mS max. |

ENVIRONMENTAL SPECIFICATIONS

| | |
|------------------------------|--|
| Operating Temperature | -25°C ~ +75°C (Case not to exceed 100°C) |
| Temperature Coefficient..... | 0.05%/°C |
| Humidity..... | 30%-95% RH |
| Storage Temperature..... | -30°C~+100°C |

PHYSICAL SPECIFICATIONS

| | |
|--------------------------------|---------------------|
| Case Material..... | Nickel-Plated Steel |
| Dual In-Line Pin Configuration | |

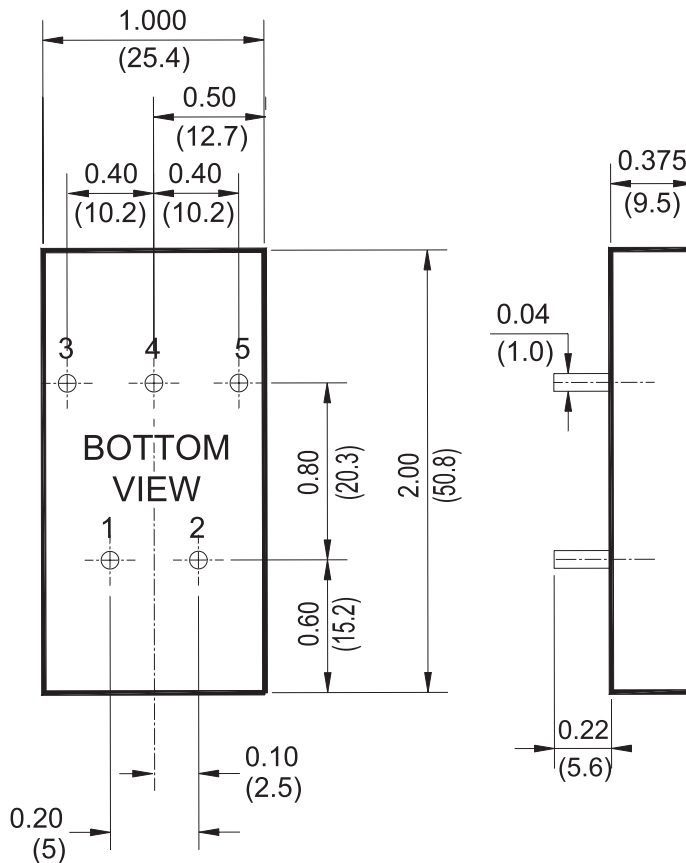
Series

| MODEL | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | | EFFICIENCY AT 100% LOAD (TYP) |
|-------------------|----------------------|----------------|----------------|--------|----------------------------------|
| | | | MIN. | MAX. | |
| MT10-1203S | 12 VDC (9 ~ 18V) | 3.3 VDC | 240mA | 2400mA | 76% |
| MT10-1205S | | 5 VDC | 180mA | 1800mA | 77% |
| MT10-1212S | | 12 VDC | 85mA | 850mA | 82% |
| MT10-1215S | | 15 VDC | 65mA | 650mA | 80% |
| MT10-1212W | | ±12 VDC | ±82mA | ±410mA | 80% |
| MT10-1215W | | ±15 VDC | ±60mA | ±330mA | 80% |
| MT10-2403S | 24 VDC (18 ~ 36V) | 3.3 VDC | 280mA | 2800mA | 78% |
| MT10-2405S | | 5 VDC | 240mA | 2400mA | 78% |
| MT10-2412S | | 12 VDC | 125mA | 1250mA | 86% |
| MT10-2415S | | 15 VDC | 125mA | 1000mA | 84% |
| MT10-2412W | | ±12 VDC | ±120mA | ±600mA | 83% |
| MT10-2415W | | ±15 VDC | ±100mA | ±500mA | 84% |
| MT10-4805S | 48 VDC (36 ~ 72V) | 5 VDC | 240mA | 2400mA | 82% |
| MT10-4812S | | 12 VDC | 125mA | 1250mA | 85% |
| MT10-4815S | | 15 VDC | 100mA | 1000mA | 84% |
| MT10-4812W | | ±12 VDC | ±120mA | ±600mA | 84% |
| MT10-4815W | | ±15 VDC | ±100mA | ±500mA | 85% |

Also available in 9-36V & 18-72V Input

PIN-OUT

| PIN | SINGLE | DUAL |
|-----|--------|--------|
| 1 | +VIN | +VIN |
| 2 | -VIN | -VIN |
| 3 | +VOUT | +VOUT |
| 4 | NO PIN | COMMON |
| 5 | -VOUT | -VOUT |



NOTE:

All specifications typical and nominal / full load and 25°C unless otherwise noted.
 Avoid sustained operation in overload or dead short conditions.
 Specifications subject to changes without notice.

