

Unregulated
Case style: DIP 8

COMMERCIAL DC/DC Converters

0,25 - 1,25 Watt
Series: MD8

Electrical specifications:

Input voltage range: +/- 10%
optional: +/- 20% (Part-No. .../W)
Output voltage accuracy: +/- 5% **
Line Voltage regulation: +/- 1,2% / 1% of Vin max.
Load Voltage regulation: 3,3V output type 20% max.
(10% to 100% full load) 5V output type 15% max.
9V ~ 24V output types 10% max.
Efficiency: min. 70%
** Note: Measured @25°C with the condition
of Vin = nominal and full load

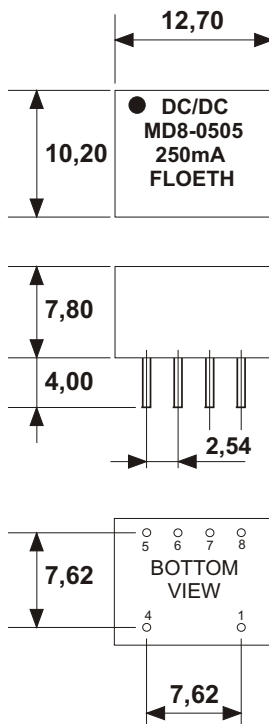
Output Ripple & Noise: 1,25W; 50mVp-p
Short circuit protection: 1.0 second
optional: /S = continuous
Operating temperature: -40°C to +85°C
Isolation voltage: min. 1000V DC
Optional Part-No.: /H min. 2000V DC

Part-No.: /2 0,25W output power
Part-No.: /5 0,5W output power
Part-No.: /7 0,75W output power

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

| Single Output | | | | Dual Output | | | |
|---------------|-----------------------|----------------------|---------------------|-------------|-----------------------|----------------------|---------------------|
| Part-No. | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Part-No. | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) |
| MD8-xx03.3 | 3.3, 5, 9, 12, 15, 24 | 3,3 | 378 | MD8-xx03.3D | 3.3, 5, 9, 12, 15, 24 | +/- 3,3 | +/-189 |
| MD8-xx05 | 3.3, 5, 9, 12, 15, 24 | 5 | 250 | MD8-xx05D | 3.3, 5, 9, 12, 15, 24 | +/- 5 | +/-125 |
| MD8-xx07 | 3.3, 5, 9, 12, 15, 24 | 7 | 180 | MD8-xx07D | 3.3, 5, 9, 12, 15, 24 | +/- 7 | +/- 90 |
| MD8-xx09 | 3.3, 5, 9, 12, 15, 24 | 9 | 140 | MD8-xx09D | 3.3, 5, 9, 12, 15, 24 | +/- 9 | +/- 70 |
| MD8-xx12 | 3.3, 5, 9, 12, 15, 24 | 12 | 104 | MD8-xx12D | 3.3, 5, 9, 12, 15, 24 | +/- 12 | +/- 52 |
| MD8-xx15 | 3.3, 5, 9, 12, 15, 24 | 15 | 84 | MD8-xx15D | 3.3, 5, 9, 12, 15, 24 | +/- 15 | +/- 42 |
| MD8-xx24 | 3.3, 5, 9, 12, 15, 24 | 24 | 52 | | | | |

Any other input or output voltages available



| PIN CONNECTION: | | | | |
|-----------------|--------|----------|--------|---------|
| PIN | SINGLE | SINGLE A | DUAL | DUAL /X |
| 1 | - IN | - IN | - IN | - IN |
| 4 | + IN | + IN | + IN | + IN |
| 5 | + Vout | + Vout | + Vout | + Vout |
| 6 | NC | NP | COM | NP |
| 7 | NP | - Vout | NP | COM |
| 8 | - Vout | NP | - Vout | - Vout |

Add "A" or "/X" to the end of partnumber.
For example MD8-0505A; MD8-1212D/X

ALL DIMENSIONS IN MM
Tolerance +/- 0.25mm
All pins on a 2,54mm pitch.
Pin size is 0,5mm (0,020 inch) DIA
NC = No connection; NP = No pin
Dot denotes +IN (pin 4)

Note: Input and output capacitor
4,7µF - 10µF recommended.

Specification may be changed without notice
please contact office for verification

We can offer EMC - Filter
according to EN55011/22 Class B.

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COMMERCIAL DC/DC Converters ISOLATED OUTPUTS

0,5 - 1 Watt
 Series: MD8

Electrical specifications:

Input voltage range: +/- 10%
 Output voltage accuracy: +/- 5% **
 Line Voltage regulation: +/- 1,2% / 1% of Vin max.
 Load Voltage regulation: 3,3V output type 20% max.
 (10% to 100% full load) 5V output type 15% max.
 9V ~ 24V output types 10% max.

Efficiency: min. 70%
 Output Ripple & Noise: typ. 75mVp-p
 Short circuit protection: 1.0 second
 Operating temperature: -40°C to +85°C
 Isolation voltage I/O: min. 1000V DC
 Isolation voltage O/O: min. 1000V DC

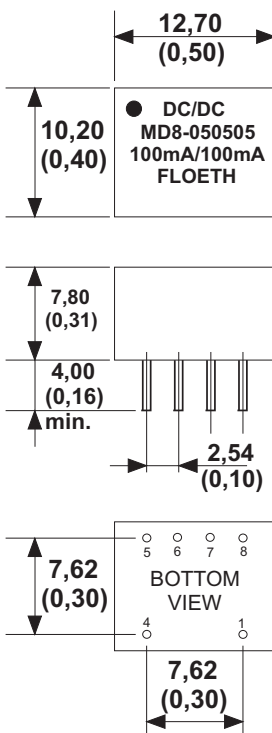
** Note: Measured @25°C with the condition
 of Vin = nominal and full load

Part-No.: /5

0,5W output power

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

| Part - No. Dual Output | Input Voltage DC | Output 1 | | Output 2 | |
|---------------------------|-------------------------------------|-------------------------|-------------------|-------------------------|-------------------|
| | | Output Voltage DC | Output Current | Output Voltage DC | Output Current |
| MD8-xx03,303,3 | 3,3V | 3,3V | 152mA | 3,3V | 152mA |
| MD8-xx053,3 | 5V | 5V | 100mA | 3,3V | 152mA |
| MD8-xx0505 | | | | 5V | 100mA |
| MD8-xx0509 | 12V | | | 9V | 56mA |
| MD8-xx0512 | 15V | | | 12V | 41mA |
| MD8-xx0515 | | | 15V | 33mA | |
| MD8-xx0909 | 18V | 9V | 56mA | 9V | 56mA |
| MD8-xx1212 | 24V | 12V | 41mA | 12V | 41mA |
| MD8-xx1515 | For example: MD8-03,303,303,3 1W | 15V | 33mA | 15V | 33mA |



Any other input & output voltages available

| PIN CONNECTION: | |
|-----------------|----------|
| PIN | DUAL |
| 1 | GND |
| 4 | VCC |
| 5 | + Vout 1 |
| 6 | - Vout 1 |
| 7 | + Vout 2 |
| 8 | - Vout 2 |

ALL DIMENSIONS IN MM (INCHES)
 Tolerance +/- 0.25mm
 All pins on a 2,54mm pitch.
 NC = No connection; NP = No pin

Note: Input and output capacitor
 4,7µF - 10µF recommended.
 Dot denotes +IN (pin 4)

Specification may be changed without notice
 please contact office for verification

We can offer EMC - Filter
 according to EN55011/22 Class B.