

1 W  
DC/DC  
SIM-DIL  
MODUL

# SIM 1 - DIL 8

1 Watt Ultra-Miniatur DIL8-Modul-Serie



HN-POWER

| Besondere Merkmale | Features |
|--------------------|----------|
|--------------------|----------|

|                                  |                                     |
|----------------------------------|-------------------------------------|
| RoHS 2002/95/EC konform          | RoHS 2002/95/EC conform             |
| Ultraminiatur-DIL8-Gehäuse       | Ultra mini DIL8 package             |
| Isolationsspannung max. 1000 VDC | Isolation voltage max. 1000 V       |
| 3000 VDC Isolation optional      | 3000 VDC isolation option           |
| kurzzeitig Kurzschlußfestigkeit  | short-time short circuit protection |

| Technische Daten | Specification |
|------------------|---------------|
|------------------|---------------|

|                                |                               |
|--------------------------------|-------------------------------|
| (bei 25°C Umgebungstemperatur) | (at 25°C ambient temperature) |
|--------------------------------|-------------------------------|

| Eingangsdaten | Input Specifications |
|---------------|----------------------|
|---------------|----------------------|

|                  |                |                            |
|------------------|----------------|----------------------------|
| Eingangsspannung | Input voltages | 5 / 12 / 15 / 24 VDC, ±10% |
| EingangsfILTER   | Input filter   | Kondensatoren, capacitors  |

| Ausgangsdaten | Output Specifications |
|---------------|-----------------------|
|---------------|-----------------------|

|                             |                                |                        |
|-----------------------------|--------------------------------|------------------------|
| Leistung                    | Power                          | 1-1,2 Watt             |
| Wirkungsgrad                | Efficiency                     | 80% typ..              |
| Regelabweichung             | Voltage accuracy               | Max. ±3%(load 100%)    |
| Restwelligkeit              | Ripple and noise               | 100 mV p-p max.        |
| Laständerung ( ≥5V output ) | Load regulation ( ≥5V output ) | ±10%, load 20% to 100% |
| Laständerung ( <5V output ) | Load regulation ( <5V output ) | ±20%, load 20% to 100% |
| Eingangsspannungsänderung   | Line regulation                | ±1.2% von $V_{in}$     |

| Allgemeine Daten | General Specifications |
|------------------|------------------------|
|------------------|------------------------|

|                                |                       |                                      |
|--------------------------------|-----------------------|--------------------------------------|
| Schaltfrequenz                 | Switching frequency   | 80 KHz typ.                          |
| MTBF                           | MTBF                  | >1.121.000 hours                     |
| Betriebstemperatur             | Operation temperature | -40°C... +85°C                       |
| Lagertemperatur                | Storage temperature   | -40°C... +125°C                      |
| Isolationsspannung             | Isolation voltage     | 1000 VDC min, 3000 VDC optional.     |
| Gehäusematerial                | Case material         | Nonconducting plastics UL94V-0 rated |
| Max. zulässige kapazitive Last | Max. capacitive load  | 220 µF(single) , 100µF(dual)         |

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# 1 W DC/DC SIM-DIL MODUL

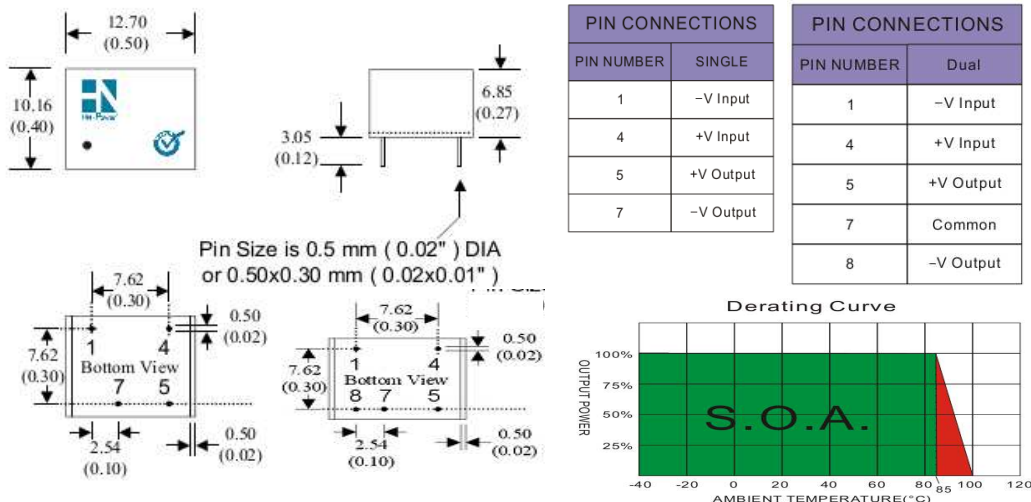
### Bestell-Information / Order Information

| Modell          | Eingang/<br>Input<br>V | Ausgang 1/<br>Output 1<br>V /mA | Ausgang 2/<br>Output 2<br>V /mA |
|-----------------|------------------------|---------------------------------|---------------------------------|
| SIM1-0505S-DIL8 | 5                      | 5/200                           |                                 |
| SIM1-0512S-DIL8 | 5                      | 12/100                          |                                 |
| SIM1-0515S-DIL8 | 5                      | 15/85                           |                                 |
| SIM1-0524S-DIL8 | 5                      | 24/50                           |                                 |
| SIM1-1205S-DIL8 | 12                     | 5/200                           |                                 |
| SIM1-1212S-DIL8 | 12                     | 12/100                          |                                 |
| SIM1-1215S-DIL8 | 12                     | 15/85                           |                                 |
| SIM1-1224S-DIL8 | 12                     | 24/50                           |                                 |
| SIM1-1505S-DIL8 | 15                     | 5/200                           |                                 |
| SIM1-1512S-DIL8 | 15                     | 12/100                          |                                 |
| SIM1-1515S-DIL8 | 15                     | 15/85                           |                                 |
| SIM1-1524S-DIL8 | 15                     | 24/50                           |                                 |
| SIM1-2405S-DIL8 | 24                     | 5/200                           |                                 |
| SIM1-2412S-DIL8 | 24                     | 12/100                          |                                 |
| SIM1-2415S-DIL8 | 24                     | 15/85                           |                                 |
| SIM1-2424S-DIL8 | 24                     | 24/50                           |                                 |
| SIM1-0505D-DIL8 | 5                      | 5/100                           | -5/100                          |
| SIM1-0512D-DIL8 | 5                      | 12/50                           | -12/50                          |
| SIM1-0515D-DIL8 | 5                      | 15/40                           | -15/40                          |
| SIM1-1205D-DIL8 | 12                     | 5/100                           | -5/100                          |
| SIM1-1212D-DIL8 | 12                     | 12/50                           | -12/50                          |
| SIM1-1215D-DIL8 | 12                     | 15/40                           | -15/40                          |
| SIM1-1505D-DIL8 | 15                     | 5/100                           | -5/100                          |
| SIM1-1512D-DIL8 | 15                     | 12/50                           | -12/50                          |
| SIM1-1515D-DIL8 | 15                     | 15/40                           | -15/40                          |

MEMO:

Andere Typen und Spannungen auf Anfrage • Other models and configurations on request.

### PIN-Belegung und Zeichnung / Pin Assignments & Drawing, mm (inch)



For reduce converter's ripple & noise, it is recommended to add a 4.7µF~100µF capacitor in output end. For EMI performance improvement, it is recommended to add a 12µH inductor and a 10µF~220µF capacitor in input end.

