

1 W  
DC/DC  
SIM-SIL  
MODUL

# SIM 1 - SIL 4

1 Watt Ultra-Miniatur SIL4-Modul-Serie



HN-POWER

Besondere Merkmale	Features
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RoHS 2002/95/EC konform	RoHS 2002/95/EC conform
Ultraminiatur-SIL4-Gehäuse	Ultra mini SIL4 package
Isolationsspannung max. 1000 VDC	Isolation voltage max. 1000 V
kurzzeitig Kurzschlußfestigkeit	short-time short circuit protection

Technische Daten	Specification
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(bei 25°C Umgebungstemperatur)	(at 25°C ambient temperature)
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Eingangsdaten	Input Specifications
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Eingangsspannung	Input voltages	5 / 12 / 15 / 24 VDC, ±10%
EingangsfILTER	Input filter	Kondensatoren, capacitors

Ausgangsdaten	Output Specifications
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Leistung	Power	1 Watt
Wirkungsgrad	Efficiency	80% typ.
Regelabweichung	Voltage accuracy	Max. ±3%(normal line, full load)
Restwelligkeit	Ripple and noise	100 mV p-p max.
Laständerung (output >= 5V)	Load regulation (output >= 5V)	±10% max, load 20% to 100%
Laständerung (output < 5V)	Load regulation (output < 5V)	±20% max, load 20% to 100%
Eingangsspannungsänderung	Line regulation	±1.2% von V <sub>in</sub>

Allgemeine Daten	General Specifications
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Schaltfrequenz	Switching frequency	80 KHz var.
MTBF	MTBF	> 1.121.000 hrs
Betriebstemperatur	Operation temperature	-40°C...+85°C
Lagertemperatur	Storage temperature	-40°C...+125°C
Isolationsspannung	Isolation voltage	1 kVDC min. 3 sec.
Gehäusematerial	Case material	Non conducting plastics UL94V-0 rated
Max. zulässige kapazitive Last	Max. capacitive load	220 µF

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# 1 W DC/DC SIM-SIL MODUL

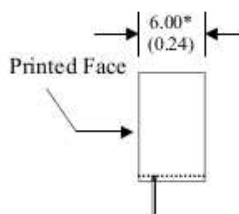
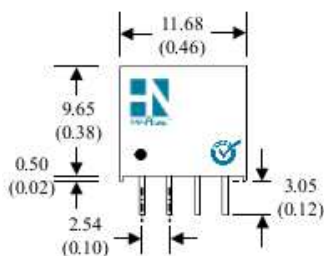
### Bestell-Information / Order Information

Modell	Eingang/Input V(max +/-10%)	Ausgang/Output V /mA
SIM1-0503-SIL4	5	3.3/300
SIM1-0505-SIL4	5	5/200
SIM1-0512-SIL4	5	12/83
SIM1-0515-SIL4	5	15/66
SIM1-0524-SIL4	5	24/42
SIM1-1203-SIL4	12	3.3/300
SIM1-1205-SIL4	12	5/200
SIM1-1212-SIL4	12	12/83
SIM1-1215-SIL4	12	15/66
SIM1-1224-SIL4	12	24/42
SIM1-1503-SIL4	15	3.3/300
SIM1-1505-SIL4	15	5/200
SIM1-1512-SIL4	15	12/83
SIM1-1515-SIL4	15	15/66
SIM1-1524-SIL4	15	24/42
SIM1-2403-SIL4	24	3.3/300
SIM1-2405-SIL4	24	5/200
SIM1-2412-SIL4	24	12/83
SIM1-2415-SIL4	24	15/66
SIM1-2424-SIL4	24	24/42

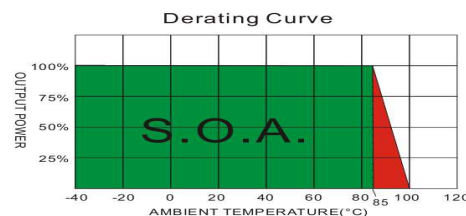
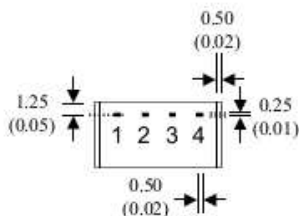
Andere Typen und Spannungen auf Anfrage • Other models and configurations on request.

### MEMO:

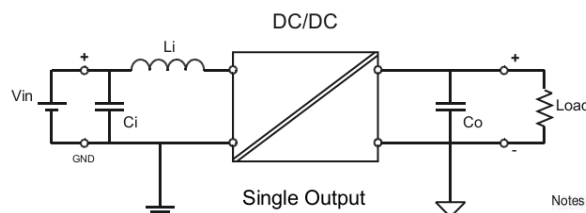
### PIN-Belegung und Zeichnung / Pin Assignments & Drawing, mm (inch)



PIN CONNECTIONS	
PIN NUMBER	SINGLE
1	-V Input
2	+V Input
3	-V Output
4	+V Output



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.



Notes : All dimensions are typical in millimeters ( inches ).  
 1. Pin diameter: 0.5±0.05 ( 0.02±0.002 )  
 2. Pin pitch tolerance: ±0.35 ( ±0.014 )  
 3. Case Tolerance: ±0.5 ( ±0.02 )