



The HS1-XXYY505Z15/P series are miniature, isolated low power and high efficiency DC/DC converters in a SIP package. They offer the ideal solution in many space critical applications for board level power distribution. The internal SMD construction makes it possible to offer a product with high performance at low cost. The series offers smaller size, improved efficiency, lower output ripple noise and 1.5KVDC isolation. Operating temperature -40 °C to +105 °C.



FEATURES:

- RoHS compliant
- Single output rail
- 1.5KVDC isolation
- High efficiency for low power applications
- SIP package styles
- Power density 0.36W/cm³
- UL 94V-0 package material
- Footprint from 0.69cm²
- Input voltage: 3.3V, 5V, 12V
- Output voltage: 3.3V, 5V, 9V, 12V, 15V
- Custom solutions available
- Operating temperature: -40°C to 105°C
- Optional: Continuous short circuit protection

H-Model	Nominal Input Voltage (V)	Output Voltage (V)	Output Current (Max./Min) (mA)	Efficiency (%)	Package Style
HS1-0303S05Z15	3,3	3,3	152/15.2	76	SIP4
HS1-0305S05Z15	3,3	5	100/10	76	SIP4
HS1-0503S05Z15	5	3,3	152/15.2	76	SIP4
HS1-0505S05Z15	5	5	100/10	76	SIP4
HS1-0509S05Z15	5	9	55.5/5.55	77	SIP4
HS1-0512S05Z15	5	12	41.7/4.17	78	SIP4
HS1-0515S05Z15	5	15	33.3/3.33	78	SIP4
HS1-1205S05Z15	12	5	100/10	76	SIP4
HS1-1209S05Z15	12	9	55.5/5.55	77	SIP4
HS1-1212S05Z15	12	12	41.7/4.17	78	SIP4
HS1-1215S05Z15	12	15	33.3/3.33	78	SIP4

The models listed above is just for standard type. If you need the special specification product, please contact our specialists: sales@haufe-power.de

Package Unit: 35

Add suffix "P" for continous short circuit protection e.g. „HS1-0305S05Z15P“.

INPUT CHARACTERISTICS (Min./Typ./Max.):

Voltage range 3.3V input types (V):	2.9 / 3.3 / 3.6
Voltage range 5V input types (V):	4.5 / 5.0 / 5.5
Voltage range 12V input types (V) :	11 / 12 / 13.3

ISOLATION CHARACTERISTICS:

Isolation test voltage (VDC):	1500 / - / - (Tested for 1 second)
Resistance (Viso = 1000 VDC) (GΩ):	1 / - / -

ABSOLUTE MAXIMUM RATINGS:

Short-circuit protection:	1 second
Lead temperature 1.5mm from case for 10 seconds:	300°C
Input voltage Vin:	5.5V / 7V / 15V (3.3V / 5V / 12V)

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OUTPUT CHARACTERISTICS (Min. / Typ. / Max.):

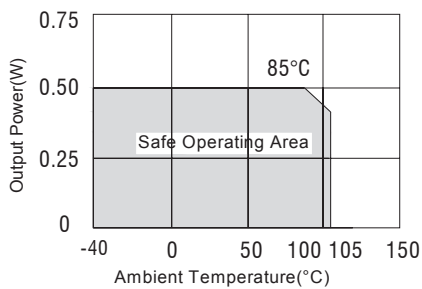
Rated Power TA= -40°C to 85°C (W):	- / - / 0.5
Voltage Set Point Accuracy (%):	(See tolerance envelope)
Line regulation High VIN to low VIN (%):	- / - / 1.2
Load Regulation (***) 5V output types (%):	- / - / 16
Load Regulation (***) All other types (output) (%):	- / - / 11

(*** = 10% load to rated load)

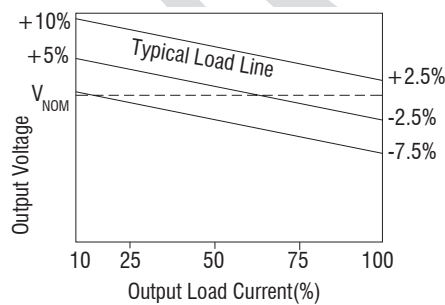
Output Characteristics Notes:

All specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified.

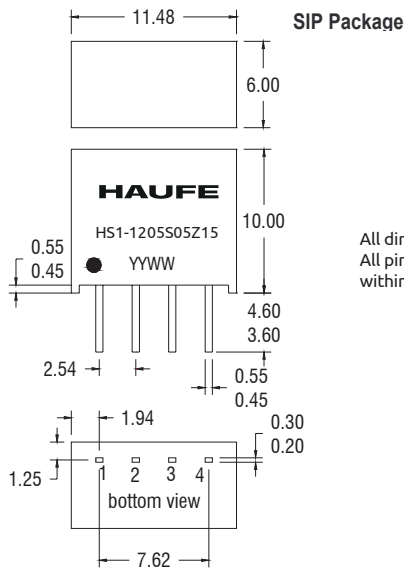
TEMPERATURE DERATING GRAPHS



TOLERANCE ENVELOPES

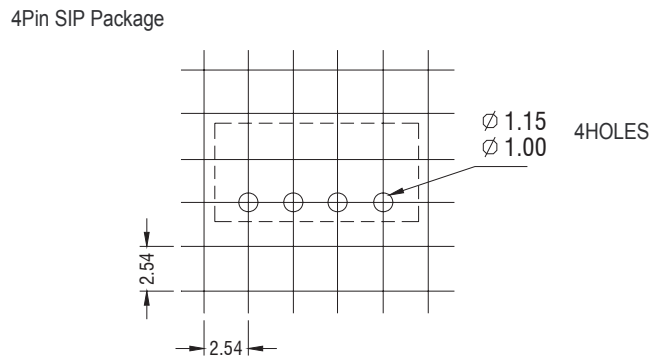


MECHANICAL DIMENSION



All dimensions in mm ±0.25mm
All pins on a 2.54mm pitch and within ±0.25mm of true position

RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS

4 PIN SIP	
Pin	Function
1	-Vin
2	+Vin
3	-Vout
4	+Vout

TUBE OUTLINE DIMENSIONS

