

ARLITECH

HDG05 Series



Features

- 2:1 Wide Input Voltage Range
- Fully Encapsulated Plastic Case
- Available RoHS Compliant
- UL, CE Safety Approving
- Industry -Standard Package and Pinout
- 32.00 x 20.32x 10.16 mm package
- 2 Years Warranty

SAFETY&EMC

SAFETY

- UL UL60950-1(Pending)
- TUV EN60950-1(Pending)

EMC

- Conduction EN55022 (Class A)
- Radiation EN55022 (Class A)

Specifications

Input

- Input Voltage Range 9~18 Vdc(12V Nom.)
18~36 Vdc(24V Nom.)
36~75 Vdc(48V Nom.)
- Input Surge Voltage 36/50/100Vdc(100ms Pulse)
- Input Filter π Type
- Reflected Ripple Current 45mA p-p
- Start-up Time 600ms

Output

- Output Power 5W
- Min Load Current 20%
- Voltage Accuracy $\pm 2\%$
- Line Regulation $\pm 1\%$
- Load Regulation $\pm 1\%$ (20%~100% load)
- Cross Regulation $\pm 5\%$ (25%~100% load)
- Transient Recovery Time 350us
- Transient Response Deviation $\pm 4\%$ of Vout(25% load step)
- Temperature Coefficient $\pm 0.02\%$
- Ripple/Noise 75mV (12V, 15V)
50mV (3.3V, 5V)

Protection

- Over Load Protection (Fold Back)
- Short Circuit Protection (Auto Recovery)

General

- Isolation Voltage (In/Out) 1000 Vdc
- Isolation Capacitance 60pF
- Isolation Resistance 1G ohm
- Case Material Plastic(UL94-V0)
- Weight 13g

Environmental

- Operating Temperature $-40^{\circ}\text{C} \sim 120^{\circ}\text{C}$ (Derating)
- Storage Temperature $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- Cooling Free air convection
- Humidity 20% ~ 95%RH
- MTBF >1.0 Million hours

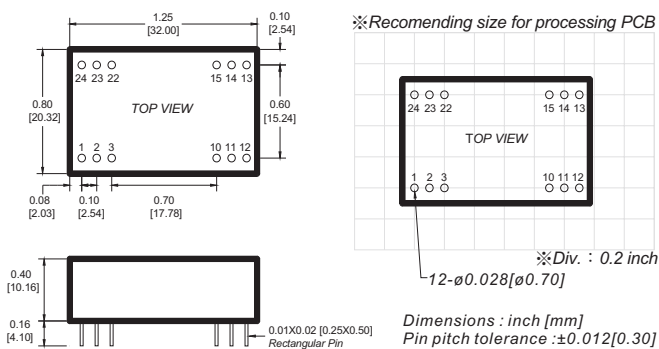
Ordering Information

SBS Power Electronic GmbH & Co.KG
 Weidenstrasse 19, 21635 Jork
 Tel:04162-911123 Info@SBS-Power.de

Module Number	Output Voltage	Output Current	Efficiency	Capacitor Load
HDG05-12S3P3	3.3V	1200mA	75%	820uF
HDG05-12S05	5V	1000mA	79%	680uF
HDG05-12S12	12V	420mA	84%	470uF
HDG05-12S15	15V	340mA	85%	330uF
HDG05-24S3P3	3.3V	1200mA	76%	820uF
HDG05-24S05	5V	1000mA	81%	680uF
HDG05-24S12	12V	420mA	85%	470uF
HDG05-24S15	15V	340mA	86%	330uF
HDG05-48S3P3	3.3V	1200mA	77%	820uF
HDG05-48S05	5V	1000mA	81%	680uF
HDG05-48S12	12V	420mA	84%	470uF
HDG05-48S15	15V	340mA	85%	330uF
HDG05-12D05	± 5V	± 500mA	79%	± 330uF
HDG05-12D12	± 12V	± 210mA	84%	± 220uF
HDG05-12D15	± 15V	± 170mA	85%	± 150uF
HDG05-24D05	± 5V	± 500mA	81%	± 330uF
HDG05-24D12	± 12V	± 210mA	85%	± 220uF
HDG05-24D15	± 15V	± 170mA	86%	± 150uF
HDG05-48D05	± 5V	± 500mA	81%	± 330uF
HDG05-48D12	± 12V	± 210mA	84%	± 220uF
HDG05-48D15	± 15V	± 170mA	85%	± 150uF

Pin Define

Pin No.	1,24	2,23	3,22	10,15	11,14	12,13
Single	+VI	NO PIN	NO PIN	-VO	+VO	-VI
Dual	+VI	-VO	COM	COM	+VO	-VI



Notes

- All specification are typical at nominal line, full load, and 25 °C ambient air temperature.
- Ripple/Noise measured with a 1uF M/C and 100uF E/C(20MHz bandwidth).
- Certain applications may require to install an external 1.5A slow blow type fuse in front of the input.
- To measure input reflected ripple current must with a simulated source inductance of 12uH, and capacitor of 220 uF offsets possible battery impedance, capacitor of 33uF mounted close to the module help ensure the stability.