

ARLITECH

HDG03 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 *4.5~9Vdc(5V Nom.)
9~18 Vdc(12V Nom.)
18~36 Vdc(24V Nom.)
36~75 Vdc(48V Nom.)*
- Input Surge Voltage *15/36/50/100Vdc(100ms Pulse)*
- Input Filter *π Type*
- Reflected Ripple Current *40mA p-p*
- Start-up Time *400ms*

Output

- Output Power *3W*
- Min Load Current *20%*
- Voltage Accuracy *±2%*
- Line Regulation *±1%*
- Load Regulation *±1%(20%~100% load)*
- Cross Regulation *±5%(25%~100% load)*
- Transient Recovery Time *350us*
- Transient Response Deviation *±4% of Vout(25% load step)*
- Temperature Coefficient *±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 *40pF*
- Isolation Resistance *1G ohm*
- Case Material *Plastic(UL94-V0)*
- Weight *12g*

Environmental

- Operating Temperature *-40°C~120°C (Derating)*
- Storage Temperature *-55°C~125°C*
- Cooling *Free air convection*
- Humidity *20% ~ 95%RH*
- MTBF *>1.0 Million hours*

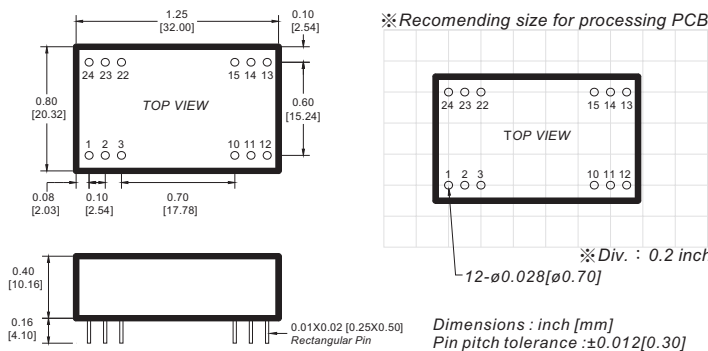
SBS Power Electronic GmbH & Co.KG
 Weidenstrasse 19, 21635 Jork
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Ordering Information

Module Number	Output Voltage	Output Current	Efficiency	Capacitor Load
HDG03-05S3P3	3.3V	900mA	66%	680uF
HDG03-05S05	5V	600mA	70%	470uF
HDG03-05S12	12V	250mA	75%	330uF
HDG03-05S15	15V	200mA	76%	220uF
HDG03-12S3P3	3.3V	900mA	73%	680uF
HDG03-12S05	5V	600mA	76%	470uF
HDG03-12S12	12V	250mA	83%	330uF
HDG03-12S15	15V	200mA	84%	220uF
HDG03-24S3P3	3.3V	900mA	76%	680uF
HDG03-24S05	5V	600mA	78%	470uF
HDG03-24S12	12V	250mA	84%	330uF
HDG03-24S15	15V	200mA	86%	220uF
HDG03-48S3P3	3.3V	900mA	78%	680uF
HDG03-48S05	5V	600mA	80%	470uF
HDG03-48S12	12V	250mA	85%	330uF
HDG03-48S15	15V	200mA	85%	220uF
HDG03-05D05	± 5V	± 300mA	70%	± 220uF
HDG03-05D12	± 12V	± 125mA	75%	± 150uF
HDG03-05D15	± 15V	± 100mA	76%	± 100uF
HDG03-12D05	± 5V	± 300mA	76%	± 220uF
HDG03-12D12	± 12V	± 125mA	83%	± 150uF
HDG03-12D15	± 15V	± 100mA	84%	± 100uF
HDG03-24D05	± 5V	± 300mA	78%	± 220uF
HDG03-24D12	± 12V	± 125mA	84%	± 150uF
HDG03-24D15	± 15V	± 100mA	86%	± 100uF
HDG03-48D05	± 5V	± 300mA	80%	± 220uF
HDG03-48D12	± 12V	± 125mA	85%	± 150uF
HDG03-48D15	± 15V	± 100mA	85%	± 100uF

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.