

ARLITECH

## HDJ05 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 *±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) *2000 Vdc*
- Isolation Capacitance *45pF*
- Isolation Resistance *1G ohm*
- Case Material *Plastic(UL94-V0)*
- Weight *13g*

## 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  
 Tel:04162-911123 Info@SBS-Power.de

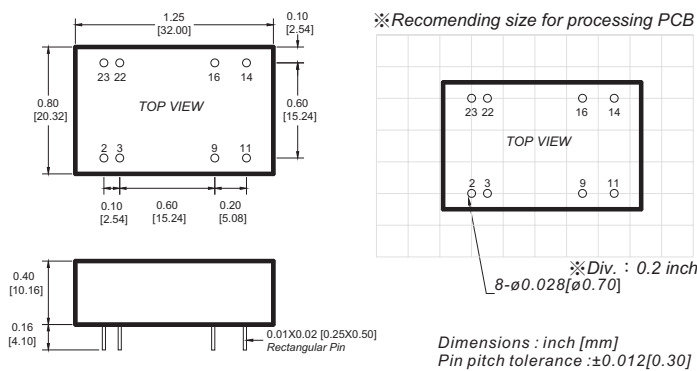
## Ordering Information

Module Number	Output Voltage	Output Current	Efficiency	Capacitor Load
HDJ05-12S3P3	3.3V	1200mA	75%	820uF
HDJ05-12S05	5V	1000mA	79%	680uF
HDJ05-12S12	12V	420mA	84%	470uF
HDJ05-12S15	15V	340mA	85%	330uF
HDJ05-24S3P3	3.3V	1200mA	76%	820uF
HDJ05-24S05	5V	1000mA	81%	680uF
HDJ05-24S12	12V	420mA	85%	470uF
HDJ05-24S15	15V	340mA	86%	330uF
HDJ05-48S3P3	3.3V	1200mA	77%	820uF
HDJ05-48S05	5V	1000mA	81%	680uF
HDJ05-48S12	12V	420mA	84%	470uF
HDJ05-48S15	15V	340mA	85%	330uF
HDJ05-12D05	± 5V	± 500mA	79%	± 330uF
HDJ05-12D12	± 12V	± 210mA	84%	± 220uF
HDJ05-12D15	± 15V	± 170mA	85%	± 150uF
HDJ05-24D05	± 5V	± 500mA	81%	± 330uF
HDJ05-24D12	± 12V	± 210mA	85%	± 220uF
HDJ05-24D15	± 15V	± 170mA	86%	± 150uF
HDJ05-48D05	± 5V	± 500mA	81%	± 330uF
HDJ05-48D12	± 12V	± 210mA	84%	± 220uF
HDJ05-48D15	± 15V	± 170mA	85%	± 150uF

● Add "H" after Order Code for isolation 4000Vdc

## Pin Define

Pin No.	2,3	9	11	14	16	22,23
Single	-VI	NC	NC	+VO	-VO	+VI
Dual	-VI	COM	-VO	+VO	COM	+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.