

ARLITECH

## HDK10A Series



## Features

- 2:1 Wide Input Voltage Range
- Fully Encapsulated Metal Case
- Available RoHS Compliant
- UL, CE Safety Approving
- Industry -Standard Package and Pinout
- 50.80 x 25.40 x 10.16 mm package
- 2 Years Warranty

## SAFETY&EMC

### SAFETY

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

### EMC

- Conduction *EN55022 (Class B)*
- Radiation *EN55022 (Class B)*

## 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 *Common Choke Type*
- Reflected Ripple Current *30mA p-p*
- Start-up Time *150ms*
- Enable(Optional) *Positive/ Negative*

### Output

- Output Power *10W*
- Min Load Current *5%*
- Voltage Accuracy *±2%*
- Line Regulation *±1%*
- Load Regulation *±1%(5%~100% load)*
- Cross Regulation *±5%(25%~100% load)*
- Transient Recovery Time *250us*
- Transient Response Deviation *±4% of Vout(25% load step)*
- Temperature Coefficient *±0.02%*
- Ripple/Noise *75mV (12V, 15V)  
50mV (3.3V, 5V)*

### Protection

- Over Voltage Protection *(Zener Diode clamp)*
- Over Load Protection *(Fold Back)*
- Short Circuit Protection *(Auto Recovery)*

### General

- Isolation Voltage (In/Out) *1600 Vdc*
- Isolation Capacitance *220pF*
- Isolation Resistance *1G ohm*
- Case Material *Copper*
- Weight *27g*

## Environmental

- Operating Temperature *-40℃~120℃ ( Derating)*
- Storage Temperature *-55℃~125℃*
- Cooling *Free air convection*
- Humidity *20% ~ 95%RH*
- MTBF *>1.5 Million hours*

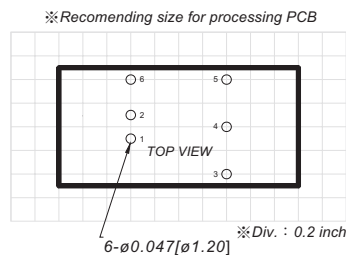
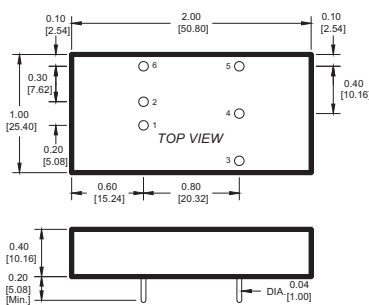
## Ordering Information

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
HDK10A-12S3P3	3.3V	3000mA	80%	2200uF
HDK10A-12S05	5V	2000mA	81%	1000uF
HDK10A-12S12	12V	835mA	83%	680uF
HDK10A-12S15	15V	670mA	83%	470uF
HDK10A-24S3P3	3.3V	3000mA	81%	2200uF
HDK10A-24S05	5V	2000mA	82%	1000uF
HDK10A-24S12	12V	835mA	84%	680uF
HDK10A-24S15	15V	670mA	84%	470uF
HDK10A-48S3P3	3.3V	3000mA	81%	2200uF
HDK10A-48S05	5V	2000mA	82%	1000uF
HDK10A-48S12	12V	835mA	84%	680uF
HDK10A-48S15	15V	670mA	84%	470uF
HDK10A-12D05	± 5V	± 1000mA	82%	± 470uF
HDK10A-12D12	± 12V	± 420mA	83%	± 330uF
HDK10A-12D15	± 15V	± 335mA	84%	± 220uF
HDK10A-24D05	± 5V	± 1000mA	83%	± 470uF
HDK10A-24D12	± 12V	± 420mA	84%	± 330uF
HDK10A-24D15	± 15V	± 335mA	85%	± 220uF
HDK10A-48D05	± 5V	± 1000mA	83%	± 470uF
HDK10A-48D12	± 12V	± 420mA	84%	± 330uF
HDK10A-48D15	± 15V	± 335mA	85%	± 220uF

## Pin Define

Pin No.	1	2	3	4	5	6
Single	+VI	-VI	+VO	NO PIN	-VO	ENABLE (OPTION)
Dual	+VI	-VI	+VO	COM	-VO	ENABLE (OPTION)



Dimensions : inch [mm]  
 Pin pitch tolerance :±0.012[0.30]

## 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 2A 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.