

ARLITECH

HDK15 Series



Features

- 4:1 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 *10~40 Vdc(24V Nom.)
18~75 Vdc(48V Nom.)*
- Input Surge Voltage *50/100Vdc(100ms Pulse)*
- Input Filter *π Type*
- Reflected Ripple Current *50mA p-p*
- Start-up Time *150ms*
- Enable(Optional) *Positive/ Negative*

Output

- Output Power *15W*
- Min Load Current *10%*
- Voltage Accuracy *±2%*
- Line Regulation *±1%*
- Load Regulation *±1%(10%~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°C~120°C (Derating)*
- Storage Temperature *-55°C~125°C*
- Cooling *Free air convection*
- Humidity *20% ~ 95%RH*
- MTBF *>1.5 Million hours*

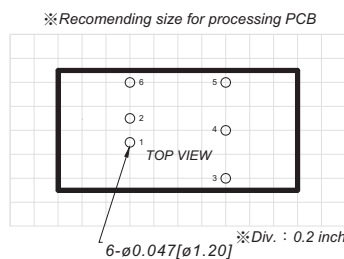
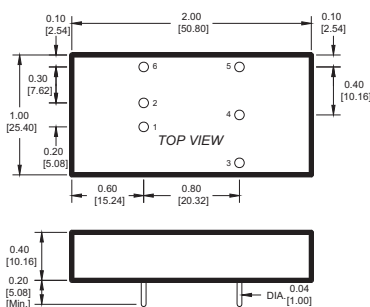
Ordering Information

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 |
|---------------|----------------|----------------|------------|----------------|
| HDK15-24S3P3 | 3.3V | 4500mA | 80% | 4700uF |
| HDK15-24S05 | 5V | 3000mA | 83% | 2200uF |
| HDK15-24S12 | 12V | 1250mA | 85% | 1000uF |
| HDK15-24S15 | 15V | 1000mA | 85% | 680uF |
| HDK15-48S3P3 | 3.3V | 4500mA | 84% | 4700uF |
| HDK15-48S05 | 5V | 3000mA | 85% | 2200uF |
| HDK15-48S12 | 12V | 1250mA | 86% | 1000uF |
| HDK15-48S15 | 15V | 1000mA | 86% | 680uF |
| HDK15-24D05 | ± 5V | ± 1500mA | 80% | ± 1000uF |
| HDK15-24D12 | ± 12V | ± 625mA | 86% | ± 470uF |
| HDK15-24D15 | ± 15V | ± 500mA | 86% | ± 330uF |
| HDK15-48D05 | ± 5V | ± 1500mA | 81% | ± 1000uF |
| HDK15-48D12 | ± 12V | ± 625mA | 87% | ± 470uF |
| HDK15-48D15 | ± 15V | ± 500mA | 87% | ± 330uF |

Pin Define

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



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 3A 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.