

ARLITECH

HDE02 Series



Features

- Low Cost
- Ultra Miniature SIP
- 2:1 Wide Input Voltage Range
- Fully Encapsulated Plastic Case
- Available RoHS Compliant
- External On/Off Function
- Industry -Standard Package and Pinout
- 21.80 x 9.20 x 11.10 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 *4.5~9 Vdc(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 *C Type*
- Reflected Ripple Current *400mA p-p*
- Start-up Time *5ms*
- Enable *Current Source(>3mA)*

Output

- Output Power *2W*
- Min Load Current *10%*
- Voltage Accuracy *±2%*
- Line Regulation *±1%*
- Load Regulation *±1%(5%~100% load)*
- Transient Recovery Time *500us*
- Transient Response Deviation *±4% of Vout(25% load step)*
- Temperature Coefficient *±0.02%*
- Ripple/Noise *50mV*

Protection

- Short Circuit Protection *(Auto Recovery)*

General

- Isolation Voltage (In/Out) *1000 Vdc*
- Isolation Capacitance *36pF*
- Isolation Resistance *1G ohm*
- Case Material *Plastic(UL94-V0)*
- Weight *4.5g*

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

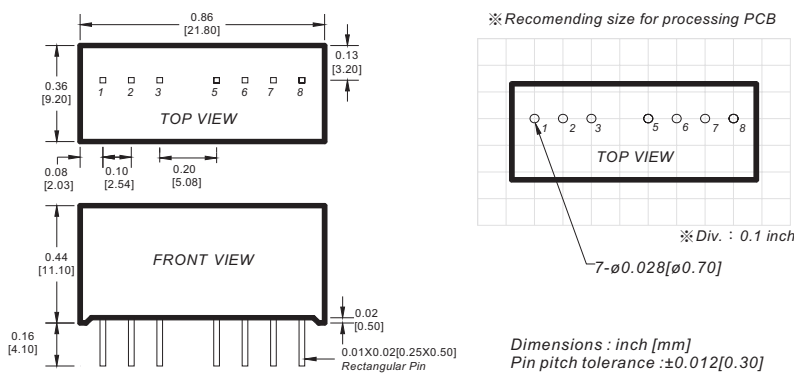
SBS Power Electronic GmbH & Co.KG
 Weidenstrasse 19, 21635 Jork
 Tel:04162-911123 Info@SBS-Power.de

Module Number	Output Voltage	Output Current	Efficiency	Capacitor Load
HDE02-05S3P3	3.3V	500mA	65%	2200uF
HDE02-05S05	5V	400mA	66%	1000uF
HDE02-05S09	9V	220mA	71%	330uF
HDE02-05S12	12V	166mA	71%	220uF
HDE02-05S15	15V	133mA	73%	100uF
HDE02-12S3P3	3.3V	500mA	70%	2200uF
HDE02-12S05	5V	400mA	75%	1000uF
HDE02-12S09	9V	220mA	79%	330uF
HDE02-12S12	12V	166mA	80%	220uF
HDE02-12S15	15V	133mA	80%	100uF
HDE02-24S3P3	3.3V	500mA	71%	2200uF
HDE02-24S05	5V	400mA	76%	1000uF
HDE02-24S09	9V	220mA	80%	330uF
HDE02-24S12	12V	166mA	80%	220uF
HDE02-24S15	15V	133mA	81%	100uF
HDE02-48S3P3	3.3V	500mA	70%	2200uF
HDE02-48S05	5V	400mA	73%	1000uF
HDE02-48S09	9V	220mA	78%	330uF
HDE02-48S12	12V	166mA	79%	220uF
HDE02-48S15	15V	133mA	79%	100uF

Pin Define

Pin No.	1	2	3	5	6	7	8
Single	-VI	+VI	ENABLE	NC	+VO	-VO	CS

● Cs: Optional external capacitor



Notes

- All specification are typical at nominal line, full load, and 25 °C ambient air temperature.
- Ripple/Noise measured with a 1uF M/C (20MHz bandwidth).
- Certain applications may require to install an external 1A 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.