

ARLITECH

HDM20A 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 40.64x 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	50mA p-p
●Start-up Time	150ms
●Enable(Optional)	Positive/ Negative

Output

●Output Power	20W
●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	42g

Environmental

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

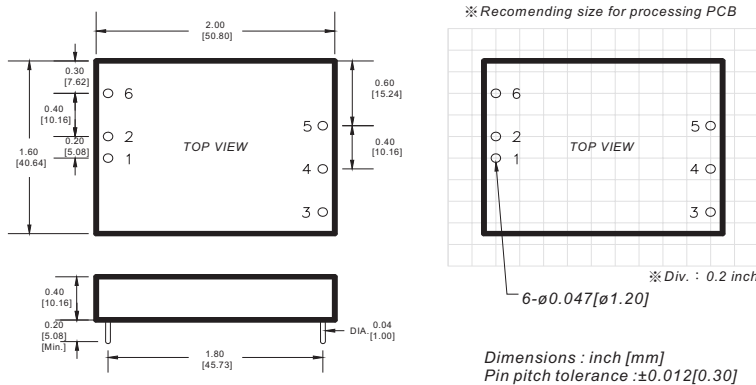
Ordering Information

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
HDM20A-12S3P3	3.3V	6000mA	84%	4700uF
HDM20A-12S05	5V	4000mA	87%	2200uF
HDM20A-12S12	12V	1670mA	86%	1000uF
HDM20A-12S15	15V	1340mA	86%	680uF
HDM20A-24S3P3	3.3V	6000mA	86%	4700uF
HDM20A-24S05	5V	4000mA	89%	2200uF
HDM20A-24S12	12V	1670mA	87%	1000uF
HDM20A-24S15	15V	1340mA	87%	680uF
HDM20A-48S3P3	3.3V	6000mA	85%	4700uF
HDM20A-48S05	5V	4000mA	89%	2200uF
HDM20A-48S12	12V	1670mA	88%	1000uF
HDM20A-48S15	15V	1340mA	88%	680uF
HDM20A-12D05	± 5V	± 2000mA	84%	± 1000uF
HDM20A-12D12	± 12V	± 835mA	86%	± 470uF
HDM20A-12D15	± 15V	± 670mA	86%	± 330uF
HDM20A-24D05	± 5V	± 2000mA	85%	± 1000uF
HDM20A-24D12	± 12V	± 835mA	87%	± 470uF
HDM20A-24D15	± 15V	± 670mA	87%	± 330uF
HDM20A-48D05	± 5V	± 2000mA	85%	± 1000uF
HDM20A-48D12	± 12V	± 835mA	88%	± 470uF
HDM20A-48D15	± 15V	± 670mA	87%	± 330uF

Pin Define

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



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.