

KDHM-B series ultra miniature high voltage DC-DC power modules is specially designed for electronic equipment, instruments and sensors in industrial, military and aerospace working environment. It has the characteristics of small volume, low power consumption, fast response, stable performance, moisture resistance, impact resistance, high reliability and high efficiency. The volume of the module is only 25.4mm × 15.2mm × 10.5mm, which is less than the coin with face value of 5 Jiao, it is relatively small in the current high voltage power supply module with the highest output of 1000V.

KDHM-B series high-voltage module has low output ripple, high output stability, wide range adjustable output voltage, and self-contained output short-circuit fast protection function. The output voltage stability and load regulation rate are all lower than 0.5%. The output voltage is continuously adjustable to the target high voltage from 0V, and the linearity of voltage regulation is more than 99%.

KDHM-B series high-voltage module has three kinds of input voltage: 5V, 12V and 24V (including 28V). The output voltage is continuously adjustable from 0 to +/-1000V. The product provides two output voltage regulation and control modes: voltage type and resistance type. Users can select 0 ~ +/-70V, 0 ~ +/-100V, 0 ~ +/-200V, 0 ~ +/-300V, 0 ~ +/-400V, 0 ~ +/-500V, 0 ~ +/-1000V and other standard models and specifications.

FEATURES

- » Ultra-small volume: 25.4mm×15.2mm×10.5mm, international standard pin spacing
- » Wide input voltage range
- » Fast transient response characteristics
- » 0 ~ +/-1000V output Voltage , continuously adjustable
- » Ultra-low output ripple and high precision output
- » With short-circuit protection
- » External 0 ~ 5V Voltage can adjust and control output voltage
- » Sealing resin pouring, all metal shielding, impact resistance, moisture proof, radiation proof



APPLICATIONS

Photomultiplier tube, nuclear detection, fire detection, security detection, petroleum industry instruments, ionization chamber, proportional counter, laser power supply, RF power supply, Geiger Maitreya (G-M) counter, electrophoresis, lens, mass spectrometer, scintillator, electron beam, ion beam, electrostatic printing, high voltage bias and other medical and chemical, scientific experiments and industrial applications.

www.xacorso.com

PARAMETERS

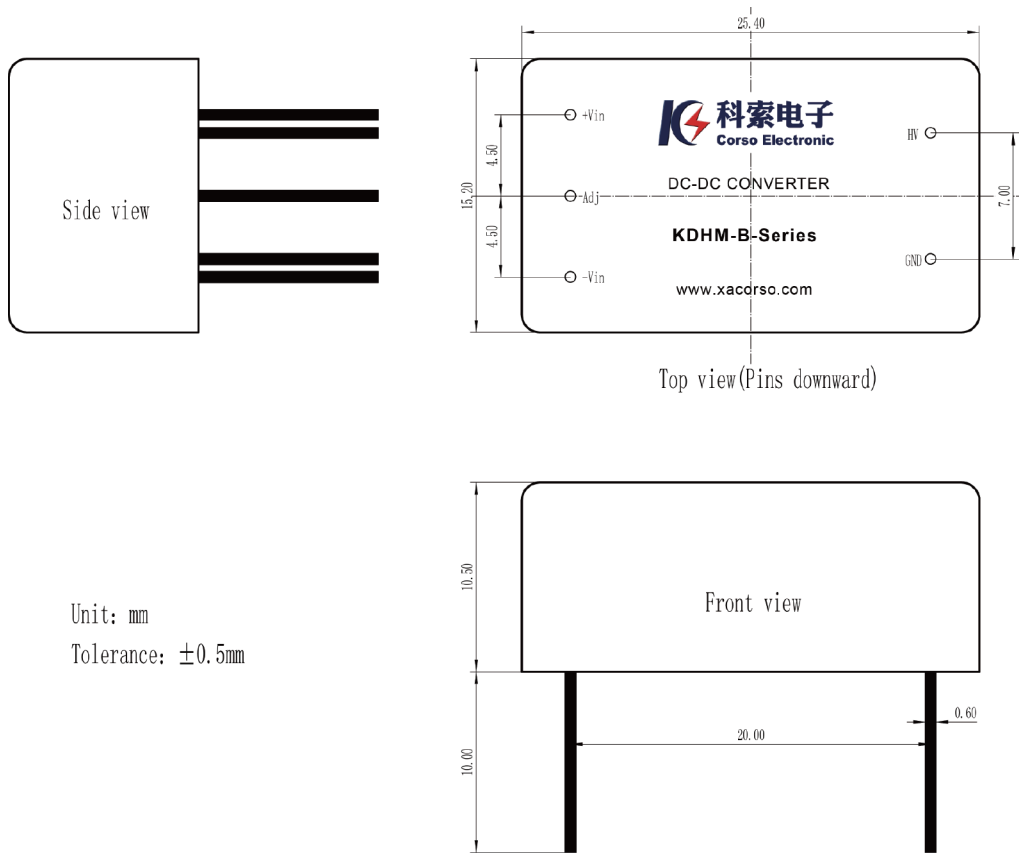
Item	Description
Production grade	G: Industrial grade J: Military grade
Input voltage	DC 5V(4.5V~7V) /12V(11V~16V) /24V(21V~28V)
Output voltage	DC 0~+/-70V, 0~+/-100V, 0~+/-200V, 0~+/-300V, 0~+/-400V, 0~+/-500V, 0~+/-1000V
Output current	DC 0.5mA~3mA
Ripple/Noise(p-p)	≤5mVp_p~100mVp-p(Full range input voltage, full range load)
Output stability	≤0.5% (Input Voltage in the nominal range, the output load in 20% ~80% variation)
Load adjustment rate	≤0.1% (Input Voltage in the nominal range, the output load in 0% ~100% variation)
Output voltage control mode	Voltage regulation mode/ Resistor regulation mode
Protection function	Short circuit protection
Operating ambient temperature	G: -20℃~+65℃ J: -40℃~+85℃
Storage temperature	-55℃~+125℃
Temperature stability	≤40PPM/℃
Operation humidity	20% ~90% RH
Output interface form	Gold plated pin type
Shell and package	Fully enclosed high thermal conductivity metal shell, sealed with resin
Size	L: 25.4mm, W: 15.2mm, H: 10.5mm
Weight	11±2g

MODEL LIST

Product Model	Input Voltage	Output Voltage	Ripple (mVp-p)	Output Current	Input Current	
					No Load	Full Load
KDHM-B-5S70P-V	4.5~7V	0~+70V	≤5mV	0~3mA	≤20mA	≤200mA
KDHM-B-5S70N-V	4.5~7V	0~-70V	≤5mV	0~3mA	≤20mA	≤200mA
KDHM-B-5S100P-V	4.5~7V	0~+100V	≤5mV	0~3mA	≤20mA	≤200mA
KDHM-B-5S100N-V	4.5~7V	0~-100V	≤5mV	0~3mA	≤20mA	≤200mA
KDHM-B-5S200P-V	4.5~7V	0~+200V	≤10mV	0~4mA	≤20mA	≤200mA
KDHM-B-5S200N-V	4.5~7V	0~-200V	≤10mV	0~4mA	≤20mA	≤200mA
KDHM-B-5S300P-V	4.5~7V	0~+300V	≤10mV	0~4mA	≤20mA	≤200mA
KDHM-B-5S300N-V	4.5~7V	0~-300V	≤10mV	0~4mA	≤20mA	≤200mA

Product Model	Input Voltage	Output Voltage	Ripple (mVp-p)	Output Current	Input Current	
					No Load	Full Load
KDHM-B-5S500P-V	4.5~7V	0~+500V	≤20mV	0~1mA	≤20mA	≤200mA
KDHM-B-5S500N-V	4.5~7V	0~-500V	≤20mV	0~1mA	≤20mA	≤200mA
KDHM-B-5S1000P-V	4.5~7V	0~+1000V	≤60mV	0~0.5mA	≤20mA	≤200mA
KDHM-B-5S1000N-V	4.5~7V	0~-1000V	≤60mV	0~0.5mA	≤20mA	≤200mA
KDHM-B-12S70P-V	11~16V	0~+70V	≤5mV	0~3mA	≤10mA	≤90mA
KDHM-B-12S70N-V	11~16V	0~-70V	≤5mV	0~3mA	≤10mA	≤90mA
KDHM-B-12S100P-V	11~16V	0~+100V	≤5mV	0~3mA	≤10mA	≤90mA
KDHM-B-12S100N-V	11~16V	0~-100V	≤5mV	0~3mA	≤10mA	≤90mA
KDHM-B-12S200P-V	11~16V	0~+200V	≤10mV	0~2mA	≤10mA	≤90mA
KDHM-B-12S200N-V	11~16V	0~-200V	≤10mV	0~2mA	≤10mA	≤90mA
KDHM-B-12S300P-V	11~16V	0~+300V	≤10mV	0~2mA	≤10mA	≤90mA
KDHM-B-12S300N-V	11~16V	0~-300V	≤10mV	0~2mA	≤10mA	≤90mA
KDHM-B-12S400P-V	11~16V	0~+400V	≤20mV	0~1mA	≤10mA	≤90mA
KDHM-B-12S400N-V	11~16V	0~-400V	≤20mV	0~1mA	≤10mA	≤90mA
KDHM-B-12S500P-V	11~16V	0~+500V	≤20mV	0~1mA	≤10mA	≤90mA
KDHM-B-12S500N-V	11~16V	0~-500V	≤20mV	0~1mA	≤10mA	≤90mA
KDHM-B-12S1000P-V	11~16V	0~+1000V	≤60mV	0~0.5mA	≤10mA	≤90mA
KDHM-B-12S1000N-V	11~16V	0~-1000V	≤60mV	0~0.5mA	≤10mA	≤90mA
KDHM-B-24S70P-V	21~28V	0~+70V	≤5mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S70N-V	21~28V	0~-70V	≤5mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S100P-V	21~28V	0~+100V	≤5mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S100N-V	21~28V	0~-100V	≤5mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S200P-V	21~28V	0~+200V	≤10mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S200N-V	21~28V	0~-200V	≤10mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S300P-V	21~28V	0~+300V	≤10mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S300N-V	21~28V	0~-300V	≤10mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S400P-V	21~28V	0~+400V	≤20mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S400N-V	21~28V	0~-400V	≤20mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S500P-V	21~28V	0~+500V	≤20mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S500N-V	21~28V	0~-500V	≤20mV	0~1mA	≤6mA	≤50mA
KDHM-B-24S1000P-V	21~28V	0~+1000V	≤60mV	0~0.5mA	≤6mA	≤50mA
KDHM-B-24S1000N-V	21~28V	0~-1000V	≤60mV	0~0.5mA	≤6mA	≤50mA

DIMENSIONAL



PINS FUNCTION

SN	Symbol	Function
1	+Vin	Input positive terminal
2	Adj	Output voltage controlling(0~5V)
3	GND	Input GND
4	HV	High voltage output positive terminal
5	HGND	High voltage output GND

CONNECTION

»» Output voltage controlled by external voltage



Topview (Pins downward)

NOTE: The instability of external control voltage should be minimized because it directly affects the stability and linearity of output voltage.

»» Output voltage controlled by external resistance



Topview (Pins downward)

CONTACT US

XI'an Corso Electronic Technology Co., Ltd.

Address: Block C Room 201 Xijing international electrical center 3rd Dianzi Road Electronic City Xi'an High-Tech District

Tel: 029-81774909

Fax: 029-81774909-807

E-mail: sales@xacorso.com

www.xacorso.com