



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Single Port USB Isolators

UH401 Series

B+B SMARTWORX

Powered by

ADVANTECH

www.advantech-bb.com



PRODUCT FEATURES

- Full (12 Mbps) or Low (1.5 Mbps) USB Speed Options
- 2kV or 4kV Isolation Protection Options
- 15 kV ESD Protection
- -40 to 80 °C Wide Operating Temperature
- High Retention USB Connectors
- Ultra-Compact Size
- USB Bus Powered
- USB Cable Included

At just 2.0 x 1.7 x 0.8 inches, these little isolators pack a powerful punch against electrical noise, surges and spikes - up to 4kV isolation. Protect expensive PCs and equipment from damaging electrical storms, power surges and other high EMI/RFI disturbances. This isolation barrier eliminates ground loops which are disruptive in measurement applications.

UH401 and UH401SL provide 4 kV isolation.
UH401-2KV and UH401SL-2KV provide 2kV isolation.

All models are USB bus powered and provide up to 100mA of current to attached downstream devices when they are attached to a full power (500 mA) USB host port.

These data rates are preconfigured at the factory. You should select a model that is appropriate for your USB peripheral (low speed or full speed). Note that high speed (480 Mbps) cannot be isolated with existing technology.

Four models are available. Select a low speed version, UH401SL or UH401SL-2KV, if you are using a low speed device. Low speed devices are typically human interface devices such as a mouse or keyboard. Use the full speed version, UH401 or UH401-2KV for full speed USB devices.

ORDERING INFORMATION

MODEL NUMBER	USB SPEED	ISOLATION
UH401	Full (12 Mbps)	4 kV
UH401SL	Low (1.5 Mbps)	4 kV
UH401-2KV	Full (12 Mbps)	2 kV
UH401SL-2KV	Low (1.5 Mbps)	2 kV



IN THE FIELD

Protecting Laptops on Field Service Calls

Industry: Industrial Automation
Product: USB Isolators



IN THE FIELD

USB Isolation in Medical Applications

Industry: Industrial Automation
Product: USB Isolators

All product specifications are subject to change without notice.

UH401 Series_2716ds

Single Port USB Isolators

UH401 Series



SPECIFICATIONS

TECHNOLOGY	
Standards	USB 1.1 12 Mbps (UH401 & UH401-2KV) 1.5 Mbps (UH401SL & UH401SL-2KV) Note: These devices are transparent to the operating system, require no software drivers and will not be enumerated in device manager.
INTERFACE	
USB Ports	High Retention USB Type B (Upstream) , Type A (Downstream), Minimum withdrawal force of 15 Newtons (~3.4 lbs-force)
LED Indicators	Power from USB bus
POWER	
Input Voltage	Standard USB bus power (5VDC)
Downstream Power Provided	Up to 100mA with full-power upstream connection
Isolation UH401-2KV	2KV
Isolation UH401SL-2KV	2KV
Isolation UH401	4KV
Isolation UH401SL	4KV

ENVIRONMENTAL	
Operating Temperature	-40 to 80 °C (-40 to 176 °F)
MTBF	1,049,851 hours
MTBF Calculation	MIL 217F Parts Count Reliability Prediction
MECHANICAL	
Enclosure	IP30 plastic case
Dimensions	4.32 x 5.08 x 2.03 cm (1.7 x 2.0 x 0.8 in)
APPROVALS/CERTIFICATIONS	
Emissions	FCC Class A, CISPR Class A (EN55022)
CE	EN61000-6-2 (Heavy Industry) EN61000-4-2 (ESD +/-8kV Contact, +/-15kV Air) EN61000-4-3 (RI) 10V/m, 80-1000MHz; 3V/m, 1.3 to 2.7 GHz EN61000-4-4 (EFT Burst) +/-2kV DC ports; +/-1kV signal ports EN61000-4-5 (Surge) +/-500V DC ports ; +/-1kV signal ports EN61000-4-6 (CI) 10Vrms, 0.15 to 80 MHz EN61000-4-8 (Magnetic) 10A/m, 50Hz & 60Hz

MECHANICAL DIAGRAM

