KETEREX

USB-150
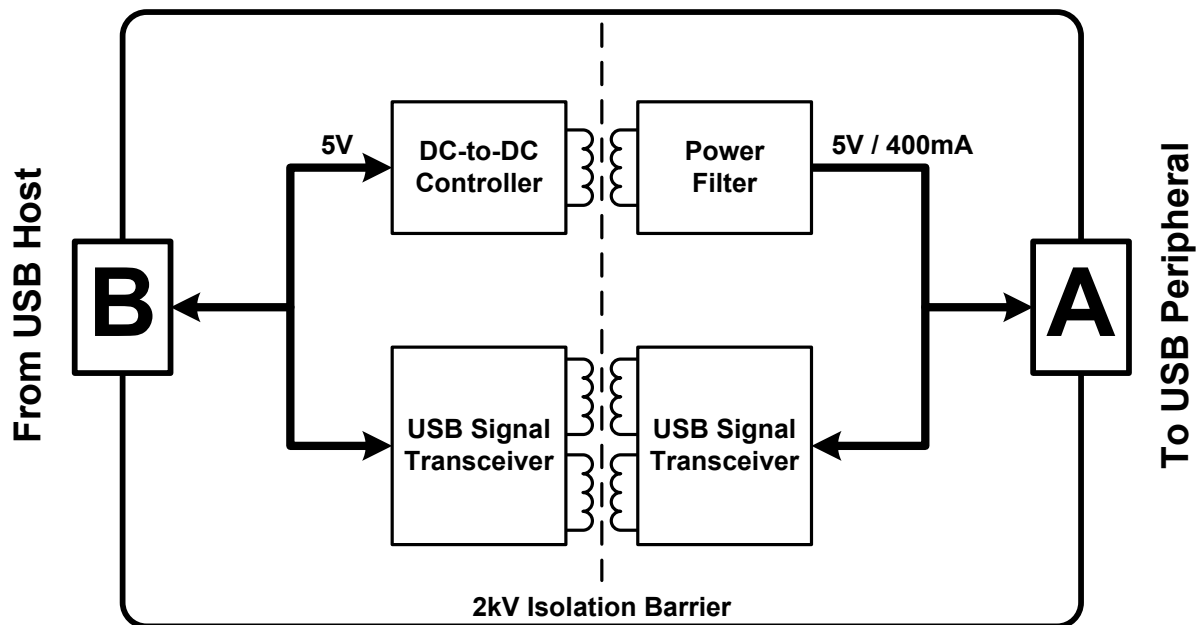## Full Speed USB Isolator

FEATURES

- Isolates a USB Peripheral from a USB Host
- Electrical Isolation up to 2000Vrms
- 5V Isolated Pass-thru Power up to 400mA
- No External Power Supply Required
- Supports USB 2.0 Full-Speed Data Rates
- Uses Standard USB A/B Cables
- No Configuration Required
- No Software or Drivers Required
- Invisible to the Host and Peripheral

GENERAL DESCRIPTION

The Keterex USB-150 Full Speed USB Isolator provides galvanic isolation between a USB peripheral and a USB host. The Isolator is connected between the host and peripheral using standard USB cables – no other software or configuration is required. In addition, the USB-150 provides an isolated 5V supply to the downstream peripheral device at up to 400mA.

The USB-150 is used in applications where either the peripheral device operates at a different ground potential than the host or where supply noise from the host needs to be eliminated. Any full-speed USB device can be isolated using the USB-150 and standard USB cables.

Keterex USB-150 Block Diagram

PERFORMANCE CHARACTERISTICS
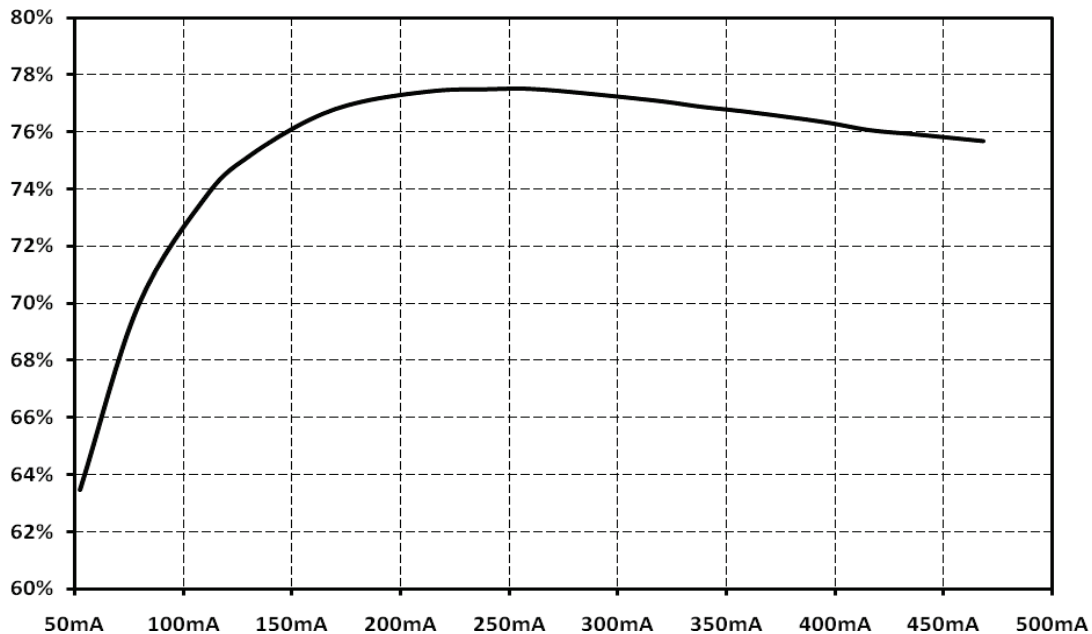
Conditions unless otherwise noted: 4.75V ≤ Upstream VBUS ≤ 5.25V, 25ºC

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Electrical Isolation[1]	Duration = 1 minute	2000			V
Downstream VBUS	Load ≤ 400mA	4.75		5.25	V
VBUS Short-circuit Duration		Inf.			sec
Downstream VBUS Ripple	Load = 100mA		±0.2		%
	Load = 400mA		±1.0		%
Common-Mode Transient Immunity	V_{CM} = 1kV; V_{TRAN} = 800V	25	35		kV/µsec

[1]Tested by applying 2250V for 1 sec

Typical VBUS Efficiency vs. Downstream Current

Contact Information

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Related Product Links

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