



Quick Reference Guide: USB Interconnects

Tyco Electronics, a standing member of the USB-IF (USB Implementers Forum), offers a wide range of products to meet your interconnect needs. Tyco Electronics offers products that accommodate the two differentially driven data wires that provide bi-directional, simultaneous signals for USB 2.0 (480 mbps) and USB 1 (1.5 & 12 mbps).

The wide variety of Tyco Electronics' USB offerings include: standard (A & B), mini B, and micro A/B and B sizes. Tyco Electronics also offers locking versions of its standard USB as well as latching versions of its standard and micro USB.

Tyco Electronics' USB system has applications in many I/O devices, including: desk and laptop computers; keyboards, mice and joysticks; printers and scanners; game ports, serial port devices, digital audio, modems and portable storage devices. Applications also include data exchange and charging capabilities for most handheld devices, such as: cell phones, GPS devices, and MP3 players.

Tyco Electronics' USB system consists of board mount receptacles and their mating cable mount, overmolded plugs. Board mount receptacles are available in numerous configurations, including: surface mount, through hole, flag, vertical, and multi-port, adding to the system's ability to meet USB applications.

FEATURES AND BENEFITS

- Complete family of board mount receptacles, including various orientations and PCB mounting styles
- Cable mount overmold plug kits for all USB sizes and types
- Consolidates serial parallel, keyboards, mice and game ports
- Compatible with asynchronous and isochronous data transfer methods
- Polarized for proper orientation
- Plug and Play capability
- Hot pluggable, permitting attaching or detaching peripherals without power down or reboot
- Allows for charging

PRODUCT APPLICATIONS

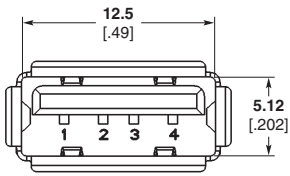
- Desktop and Laptop Computers
- Keyboards
- Mice
- Joysticks
- Printers
- Scanners
- Game Ports
- Digital Audio
- Modems
- Portable Storage Devices
- Cell Phones
- GPS Devices
- MP3 Players

USB-IF is a trademark of Universal Serial Bus Implementers Forum, Inc.

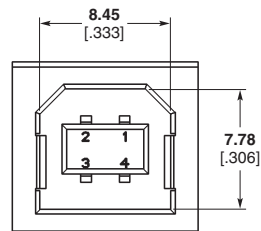
<http://www.tycoelectronics.com>

PRODUCT SIZES

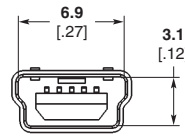
Full Size USB A



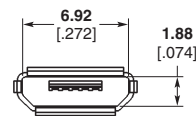
Full Size USB B



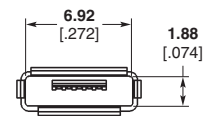
Mini USB B



Micro USB B



Micro USB AB



FULL SIZE USB

Series A Receptacles

	Part Number	Orientation	Board Mount	Housing Color	USB 2.0 Compliance	No. of Ports	Description
	292303-1	Right Angle	Through Hole	Black	60001133	1	Solder Tail Length 2.84mm/ Kinked Legs
	292303-2	Right Angle	Through Hole	Black		1	Solder Tail Length 2.29mm / Kinked Legs
	292303-4	Right Angle	Through Hole	Black		1	Solder Tail Length 2.84mm / Kinked Legs / High Temperature Compatible
	292303-5	Right Angle	Through Hole	Natural		1	Solder Tail Length 2.84mm / Kinked Legs
	292303-6	Right Angle	Through Hole	Black		1	Solder Tail Length 2.29mm / Kinked Legs / High Temperature Compatible
	1-1734081-3	Right Angle	Through Hole	Black		1	Solder Tail Length 2.25mm / Straight Legs
	1734081-1	Right Angle	Through Hole	Black		1	Solder Tail Length 2.80mm / Kinked Legs
	4-1734081-2	Right Angle	Through Hole	Grey		1	Solder Tail Length 2.80mm / Kinked Legs
	5353929-1	Right Angle	Surface Mount	White	60000276	1	
	5787761-1	Right Angle	Through Hole	Black	60000277	1	Solder Tail Length 2.84mm / Kinked Legs / With Panel Ground
	292303-7	Right Angle	Surface Mount	Natural		1	T/H Solder Legs
	292303-9	Right Angle	Surface Mount	Natural		1	High Temperature Surface Mount Hold Down Tab
	1734366-1	Vertical	Through Hole	Black	60000042	1	
	292336-1	Flag	Through Hole	Black	60000047	1	
	5787617-1	Right Angle	Through Hole	Black	60000044	2	Solder Tail Length 2.84mm / Kinked Legs
	5787617-4	Right Angle	Through Hole	Black		2	Solder Tail Length 2.84mm / Kinked Legs
	5787745-1	Right Angle	Through Hole	Black	60000046	2	Solder Tail Length 2.84mm / Kinked Legs / With Panel Ground
	5787745-2	Right Angle	Through Hole	Black		2	Solder Tail Length 2.29mm / Kinked Legs / With Panel Ground
	5787745-4	Right Angle	Through Hole	Black		2	Solder Tail Length 2.84mm / Kinked Legs / With Panel Ground
	1775066-1	Vertical	Through Hole	Black		2	
	1674451-3	Right Angle	Through Hole	Natural	60000713	3	
	1-1734383-2	Right Angle	Through Hole	Black		4	Solder Tail Length 2.36mm / Straight and Kinked Legs / With Panel Ground
	1-1775855-1	Right Angle	Through Hole	Black		1 (USB) 1 (RJ45)	RJ-45 Mod Jack Over Single USB
	611615-1	Right Angle	Through Hole	Black		2 (USB) 1 (RJ45)	RJ-45 Mod Jack Over Stacked USB
	1620000-1	Right Angle	Through Hole	Black		2 (USB) 1 (RJ45)	RJ-45 With Magjack Over Stacked USB

FULL SIZE USB


Series A Plug Kits

	Part Number	Orientation	Board Mount	Housing Color	USB 2.0 Compliance	No. of Ports	Description
	1734080-1	Right Angle	Surface Mount	Black		1	
	1734028-1	Right Angle	Surface Mount	Natural		1	
	1734080-2	Right Angle	Surface Mount	White		1	
	1734372-1	Vertical	Solder Tabs	Black		1	

USB Interconnects


FULL SIZE USB

Locking

	Part Number	Orientation	Board Mount	Gender	Housing Color	USB 2.0 Compliance	No. of Ports	Description
	1775690-2	Vertical	Through Hole	Rcpt.	Black		1	
	2041039-1	Right Angle	Through Hole	Rcpt.	Black		1	



FULL SIZE USB

Latching



	Part Number	Orientation	Board Mount	Gender	Housing Color	USB 2.0 Compliance	No. of Ports	Description
	2040305-1	Vertical	Solder Tabs	Plug Kit	Black		1	Integrated Latches
	2013798-1	Vertical	Solder Tabs	Plug Kit	Black		1	Mass Production

FULL SIZE USB



Series B Receptacles

	Part Number	Orientation	Board Mount	Housing Color	USB 2.0 Compliance	No. of Ports	Description
	292304-1	Right Angle	Through Hole	Black	60001134	1	Shell Plating: Bright Tin Over Nickel
	292304-2	Right Angle	Through Hole	Natural		1	
	292317-4	Right Angle	Through Hole	Black		1	Shell Plating: Nickel, Matte Tin on Tails
	1734346-1	Right Angle	Surface Mount	Black		1	
	1734346-4	Right Angle	Surface Mount	White		1	
	5787834-1	Vertical	Through Hole	Black	60000281	1	
	5788336-1	Vertical	Through Hole	Black		1	
	1734517-1	Vertical	Surface Mount	Black		1	

MINI USB

	Part Number	Orientation	Board Mount	Gender	Housing Color	USB 2.0 Compliance	No. of Ports	Description
	1734035-1	Right Angle	Surface Mount	Rcpt.	Black		1	Packaging
	1734035-2	Right Angle	Surface Mount	Rcpt.	Black	60001202	1	Packaging
	1734205-1	Vertical	Solder Tabs	Plug Kit	Black			
	1734753-1	Vertical	Through Hole	Rcpt.	Black		1	

MICRO USB

	Part Number	Orientation	Board Mount	Gender	Housing Color	USB 2.0 Compliance	No. of Ports	Description
Series B								
	1981568-1	Right Angle	Surface Mount	Rcpt.	Black		1	
	1939054-1	Vertical	Solder Tabs	Plug Kit	Black	60001202		
Series AB								
	1981584-1	Right Angle	Surface Mount	Rcpt.	Grey		1	
Series A								
	1939053-1	Vertical	Solder Tabs	Plug Kit	Natural			

USB Interconnects

QUESTIONS TO ASK AT DESIGN IN

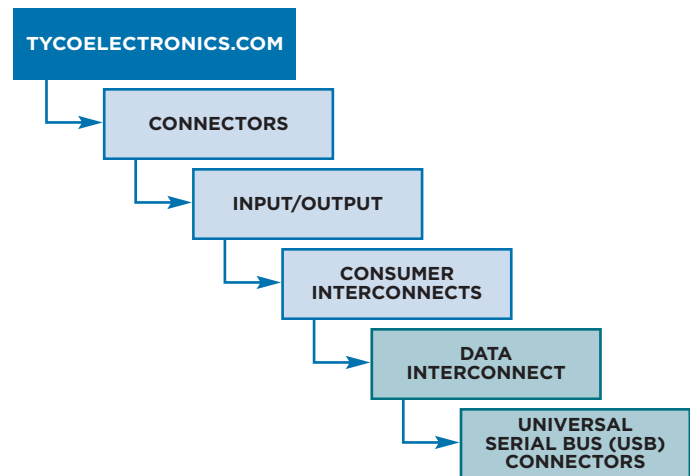
- How do I know if this part is USB 2.0 compliant?
Visit: <http://www.usb.org/developers/compliance>
Select integrators list, select integrators list again
- How do I find the operating temperature range?
Visit: <http://www.tycoelectronics.com/products/USB>
See performance characteristics section
- How do I find the power rating for charging?
Visit: <http://www.tycoelectronics.com/products/USB>
See performance characteristics section

YOU ARE HERE (E-CATALOG)

[Link](#)

<http://tycoelectronics.com/products/USB>

[Breakdown From Main Page](#)



Disclaimer

While Tyco Electronics has made every reasonable effort to ensure the accuracy of the information in this catalog, Tyco Electronics does not guarantee that it is error-free, nor does Tyco Electronics make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current.

Tyco Electronics reserves the right to make any adjustments to the information contained herein at any time without notice. Tyco Electronics expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose.

The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Please consult Tyco Electronics for the latest dimensions and design specifications.

Restriction on the use of Hazardous Substances (RoHS)

At Tyco Electronics, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

RoHS Compliant — Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

Getting the Information You Need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we've got the answers at www.tycoelectronics.com/leadfree

RoHS
Customer
Support
Center 

© 2008 Tyco Electronics Corporation. All Rights Reserved.

TE LOGO and TYCO ELECTRONICS are trademarks. Other products, logos and company names mentioned herein may be trademarks of their respective owners.

USB-IF is a trademark of Universal Serial Bus Implementers Forum, Inc.

Dimensions are in millimeters with inches (if shown) in brackets. Specifications subject to change.

For more information, contact your Tyco Electronics sales engineer at the numbers listed below, or visit our Website at: <http://www.tycoelectronics.com>.

USA: 1-800-522-6752

C. America: 52-55-1106-0803

Japan: 81-44-844-8013

Canada: 1-905-470-4425

S. America: 55-11-2103-6000

UK: 31-73-6246-431

Mexico: 01-800-733-8926

Hong Kong: 852-2735-1628

1-1773453-6-5K-FP-LUG-9/08

 **Tyco Electronics**
Our commitment. Your advantage.