

## UNIVERSAL SERIAL BUS CONNECTORS



## DESCRIPTION

The Amphenol U27 and U28 Series is a complete system of interconnection technology designed in accordance with Universal Serial Bus Specification Version 2.0. This type of connector is designed to replace all the various input output interfaces used on personal computers, providing a single interface for all of your peripherals. The USB system of connectors is being supported by a consortium of peripheral and computer manufacturers which will make it a standard on the next generation of computers and their peripherals.

## FEATURES

- Confirms to universal serial bus specification version 2.00
- Supports hot pluggability removing the need to shut down your system to make modifications
- Metal shell for shielding
- 4 position connector with 2mm centerline signal and 2.5mm centerline power contacts
- Connector is polarized for proper termination
- Can be used with asynchronous and isochronous data transfer methods, supports data rates up to 480 Mbps
- Plug and Play capability
- Outer power contact positions accept 20-24 AWG wire
- Signal contact positions accept 26-28 AWG wire
- High temperature material (<260° C) is available on select versions

## SPECIFICATIONS

### PHYSICAL CHARACTERISTICS

Housing Flammability Rating:	UL 94V-0
Housing Material:	Thermoplastic
Shell Plating:	<b>Nickel</b> over Copper alloy
Shell Material:	Copper alloy
Solder Tail Plating:	Tin over Nickel

### ELECTRICAL CHARACTERISTICS

Voltage Rating:	30 Vac (rms)
Current Rating:	1 Amp maximum per contact
Dielectric Withstanding Voltage:	750 VAC at sea level
Insulation Resistance:	1000 M $\Omega$
Capacitance:	2 pF maximum
Contact Resistance:	30 m $\Omega$ maximum

### MECHANICAL CHARACTERISTICS

Durability:	1500 mating cycles
Mating Force:	35 Newtons maximum
Unmating Force:	10 Newtons minimum

**\*All materials are RoHS compliant**

### ENVIRONMENTAL CHARACTERISTICS

Temperature Rating:	-55 to 85 degrees C
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## APPLICATIONS

- Personal Computer
- Computer Peripheral
- Keyboard
- Mouse
- Modem
- Printer
- Joystick
- Game Port
- Speaker

## CONTACT REEL SIZE

- Crimp 20-24 AWG: 10,000 contacts
- Crimp 26-28 AWG: 20,000 contacts

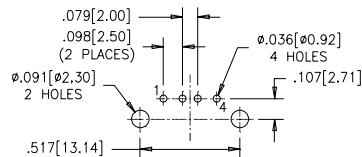
## TOOLING

- Hand crimp tool part number 357-1002 (For crimping contacts only)

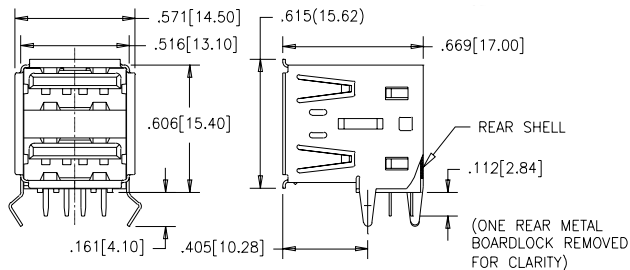
## TYPE A RECEPTACLE



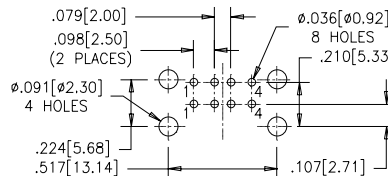
UE27-ACX4-XXX



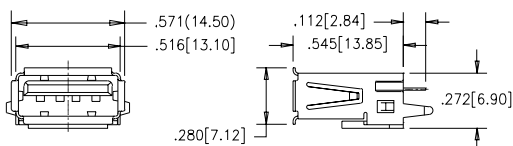
RECOMMENDED P.C.B. LAYOUT  
(COMPONENT SIDE OF BOARD)



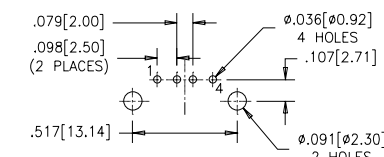
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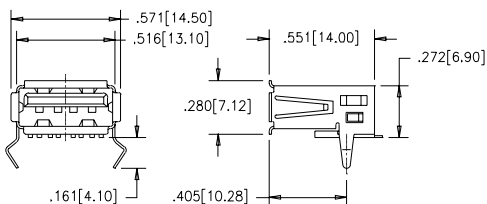
RECOMMENDED P.C.B. LAYOUT  
(COMPONENT SIDE OF BOARD)



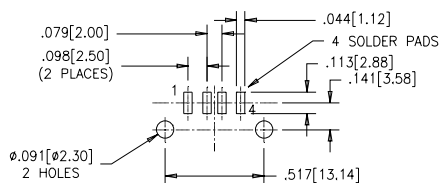
UE27-AEX4-XOX



RECOMMENDED P.C.B. LAYOUT  
(COMPONENT SIDE OF BOARD)

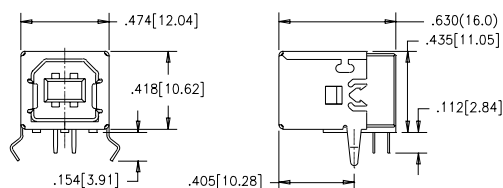


UE27-AMX4-XOH

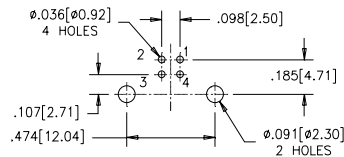


RECOMMENDED P.C.B. LAYOUT  
(COMPONENT SIDE OF BOARD)

## TYPE B RECEPTACLE



UE27-BCX4-XXX



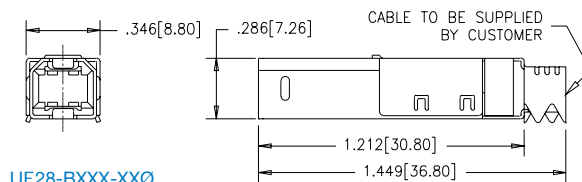
RECOMMENDED P.C.B. LAYOUT  
(COMPONENT SIDE OF BOARD)

## TYPE A PLUG



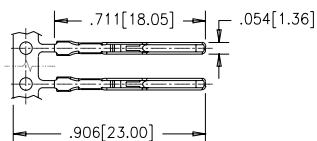
UE28-AXXX-XXØ

## TYPE B PLUG



UE28-BXXX-XXØ

## CONTACTS (CRIMP)



UE28-CKXØ-ØØØ



Specifications subject to change without notice. Contact factory for latest specifications

