

### **USB, MINI USB, FIREWIRE &** MINI FIREWIRE

**UNIVERSAL SERIAL BUS & IEEE 1394 FIREWIRE** 



#### **INTRODUCTION:**

Adam Tech USB (Universal Serial Bus) and IEEE 1394 (Firewire) Series connectors are a complete line of shielded, hot pluggable, high speed I/O interface connectors available in a variety of body styles, sizes, positions and mounting orientations. Each is shielded for superior EMI/RFI protection and features spring contacts for exceptional connectivity properties. Specially designed shells with flares eliminate misconnection and kinked boardlocks add a strong, stable PCB attachment. An ideal solution for a low cost, high speed connection to peripheral devices.

#### **FEATURES:**

**Industry Standard Compatible** High Speed I/O applications Variety of Circuit sizes Variety of Body Styles Standard and Mini versions Shielded for EMI/RFI protection

#### **MATING CONNECTORS:**

Adam Tech USB and IEEE 1394 series connectors and all industry standard USB and IEEE 1394 connectors.

#### SPECIFICATIONS:

#### Material:

Standard insulator: PBT, Glass filled, rated UL94V-0 Optional Hi-Temp insulator: Nylon PA9T, rated UL94V-0

Insulator Color: Black (White optional) Contacts: Phosphor Bronze or Brass

Shell: Steel, nickel plated

#### **Contact Plating:**

Gold Flash over Nickel on mating area, Tin over

Copper underplate on tails

#### **Electrical:**

Operating Voltage: 30V AC Current Rating: 1 Amp max. Contact Resistance: 30 m $\Omega$  max. Insulation Resistance: 1000 M $\Omega$  min.

Dielectric Withstanding Voltage: 100V AC for 1 minute

#### Mechanical:

Insertion force: 3 oz max. Withdrawal force: 0.5 oz min.

**Temperature Ratings:** 

Operating Temperature: PBT: -40°C to +85°C Nylon PA9T: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays or tubes

#### **APPROVALS AND CERTIFICATIONS:**

UL Recognized File No. E224053 CSA Certified File No. LR1578596



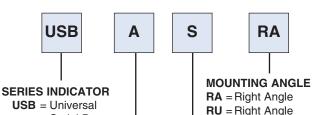
www.usb.org







#### ORDERING INFORMATION



Serial Bus

MUSB = Mini USB **FWC** = IEEE 1394,

Firewire

MFW = Mini IEEE

1394, Firewire

MCR = Micro USB

- PORTS

**S** = Single port **D**= Dual port

Upright

**VT** = Vertical Mount

**S** = Wire Termination

(Plug Only)

**T** = Triple port

**Q**= Quad port

#### TYPE -A = USB Type "A"

**B** = USB Type "B"

AB = USB Type "AB" (Mini) mid-mount

B4 = USB Type "B" (Mini) 4 pin B5 = USB Type "B" (Mini) 5 pin

C = Firewire (IEEE 1394)

**D** = Firewire (IEEE 1394B) Bilingual Type

P = Firewire Plug (IEEE 1394)

AP = USB Type A Plug **BP** = USB Type B Plug

ABI = USB Type AB (Mini Top Mount)

#### **OPTIONS:**

Add as Suffix to basic part no.

**SMT** = Surface Mount Leads with Hi-Temp insulator for Hi-Temp soldering processes up to 260°C

30 = 30 µin gold plating in contact area

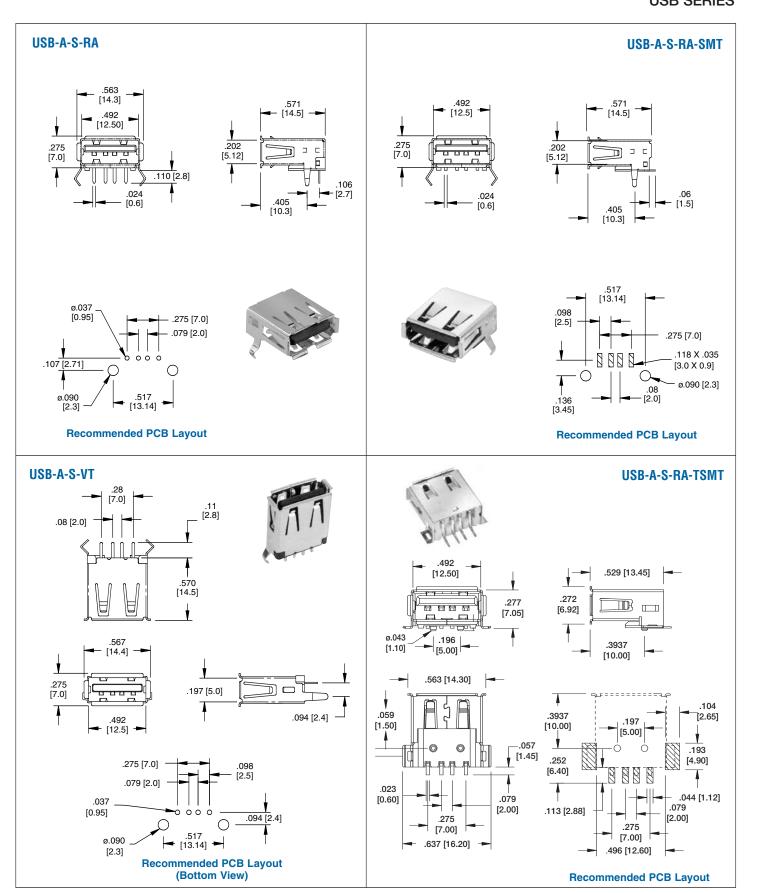
WT = White color insulator

**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C (Add this option for thru-hole products only. All SMT products are manufactured with Hi-Temp insulators)

T/R = Tape & Reel packaging



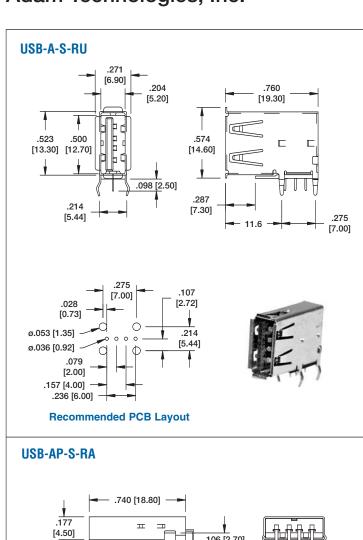
# TYPE A SINGLE PORT USB SERIES

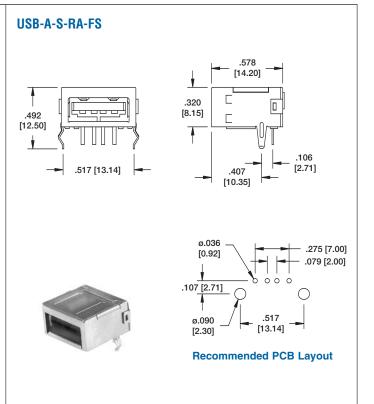


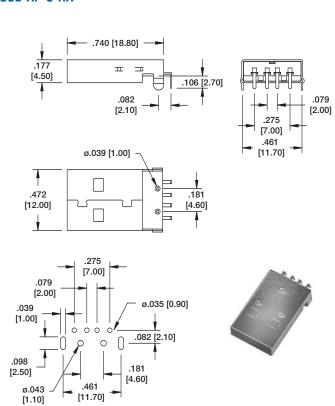


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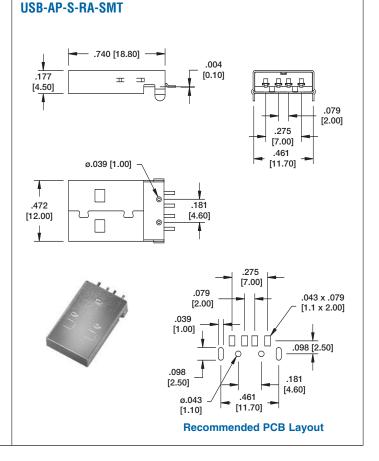
## Adam Technologies, Inc.





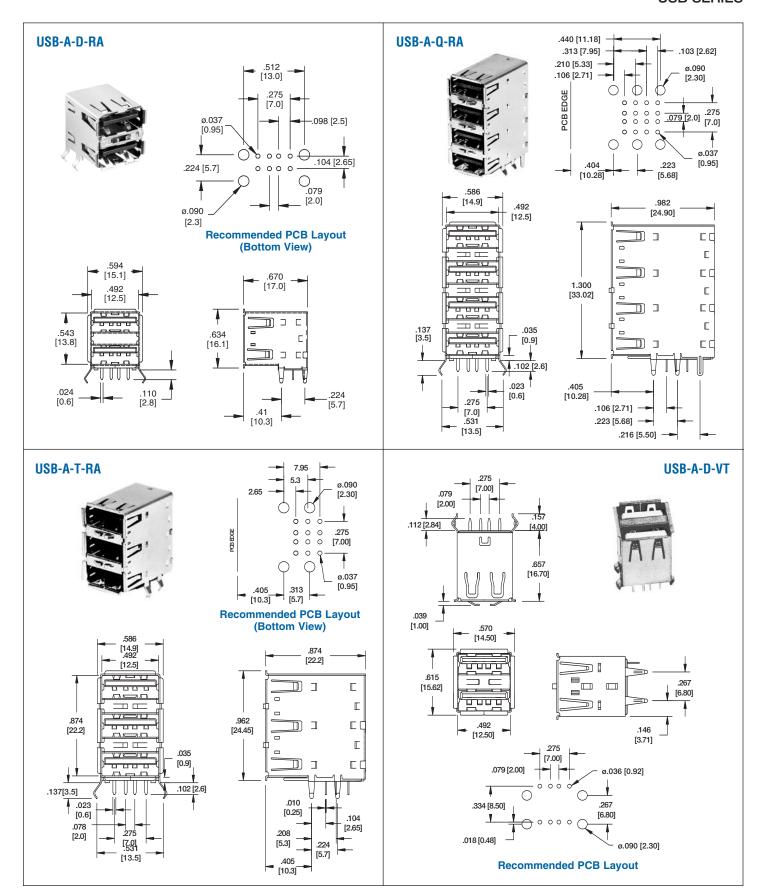


**Recommended PCB Layout** 



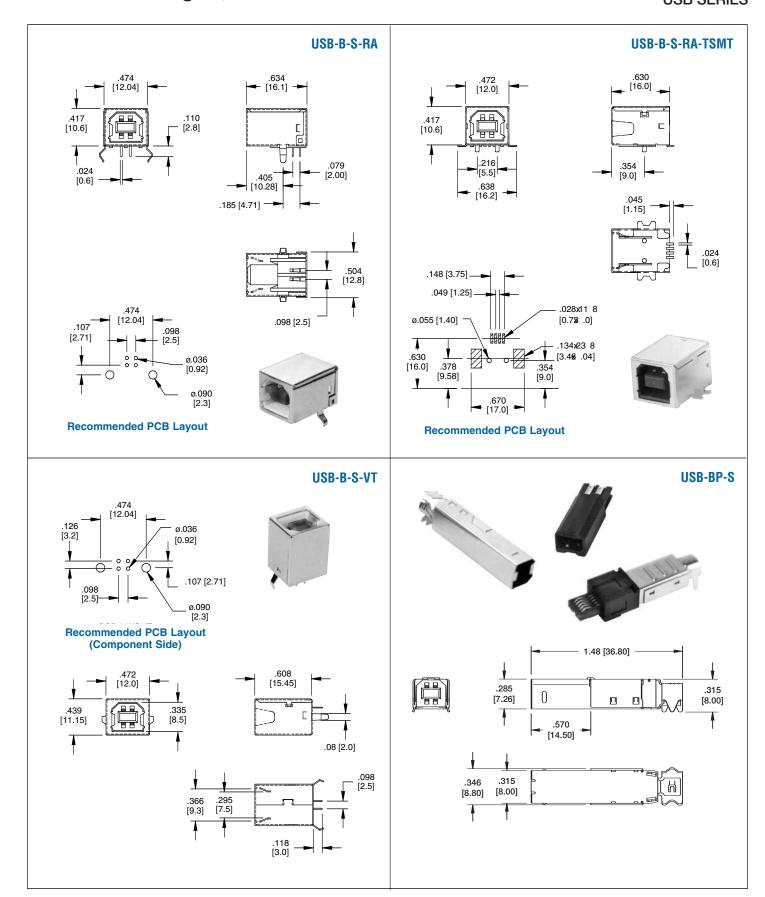


TYPE A STACKED PORTS
USB SERIES





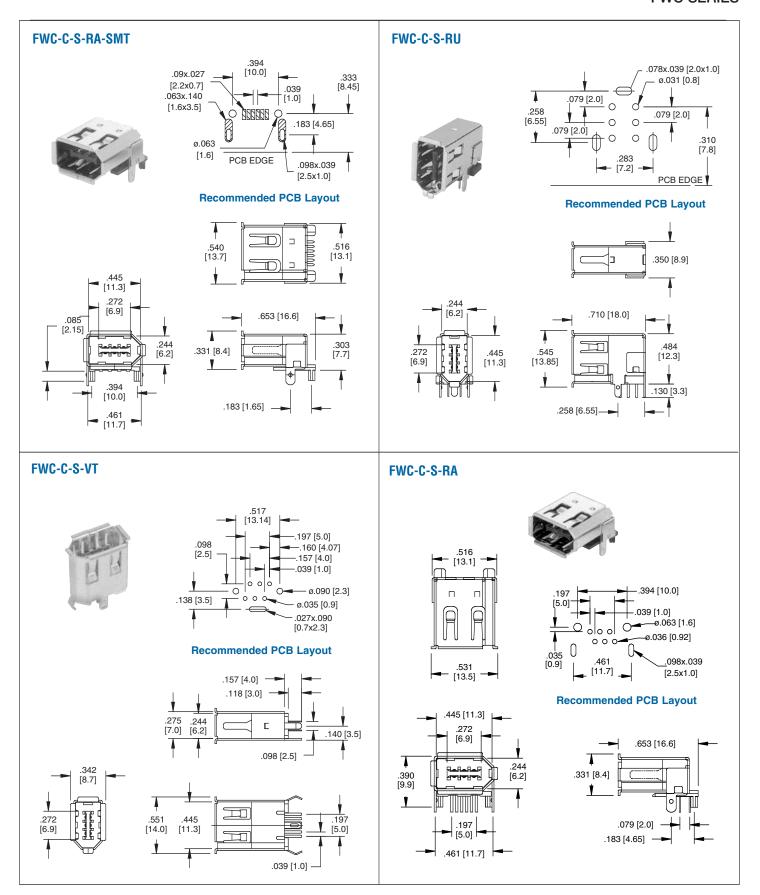
TYPE B SINGLE PORT & TYPE B PLUG USB SERIES





### **IEEE 1394 FIREWIRE**

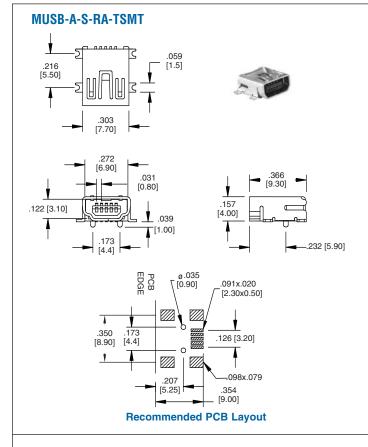
SINGLE PORT, THRU-HOLE & SMT FWC SERIES

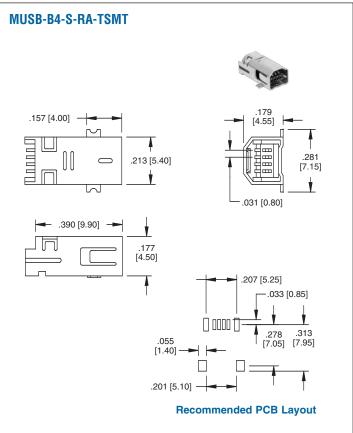


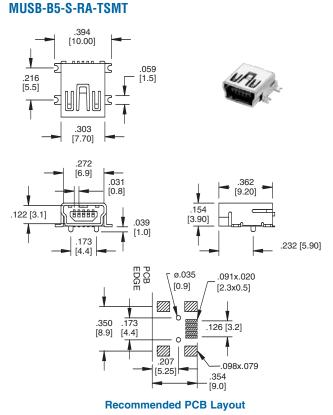


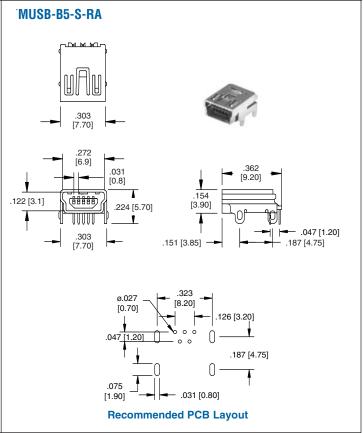
### **MINI USB**

TYPE A, B4 & B5
MUSB SERIES











### **MINI & MICRO USB**

TYPE AB, AB1 & A4
MUSB SERIES

