USB & IEEE 1394 FIREWIRE

UNIVERSAL SERIAL BUS & IEEE 1394 FIREWIRE

USB & FWC SERIES

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 and 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:
Insulator: PBT, Glass filled, rated UL94V-0
or Hi-Temp 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: 250V AC
Current Rating: 1 Amps max.
Contact Resistance: 30 mΩ max.
Insulation Resistance: 100 MΩ min.
Dielectric Withstanding Voltage: 250V AC for 1 minute

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

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

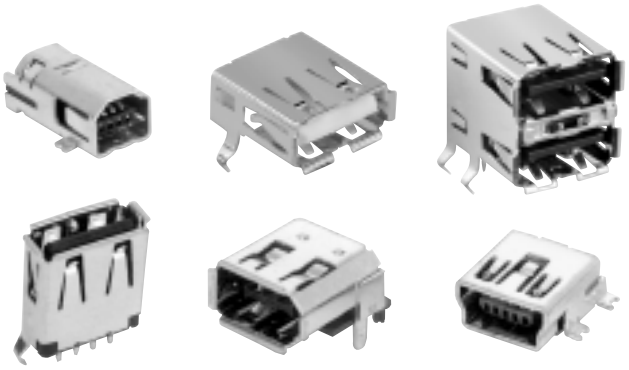
PACKAGING:
Anti-ESD plastic trays or tubes

APPROVALS AND CERTIFICATIONS:
UL Recognized File No. E224053
CSA Certified File No. LR1578596

Pb-free Option available

RoHS COMPLIANT OPTION AVAILABLE

HI-SPEED CERTIFIED USB
www.usb.org



ORDERING INFORMATION

USB | A | S | RA

SERIES INDICATOR
USB = Universal Serial Bus
MUSB = Mini USB
FWC = IEEE 1394, Firewire
MFW = Mini IEEE 1394, Firewire

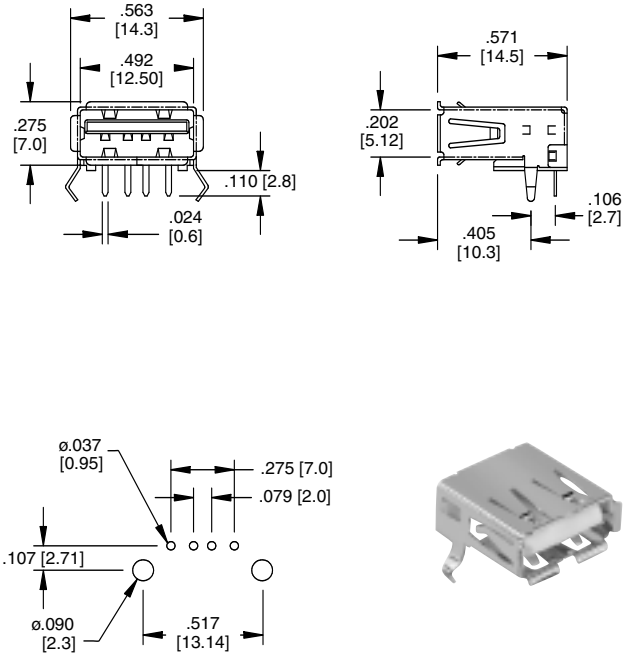
TYPE
A = Type "A"
B = Type "B"
AB = Type "AB" (Mini)
B4 = Type "B" (Mini) 4 pin
B5 = Type "B" (Mini) 5 pin
C = Firewire (IEEE 1394)
D = Firewire (IEEE 1394B) Bilingual Type
P = Firewire Plug (IEEE 1394)

PORTS
S = Single port
D = Dual port

MOUNTING ANGLE
RA = Right Angle,
RU = Right Angle, Upright
VT = Vertical Mount
S = Wire Termination (Plug Only)

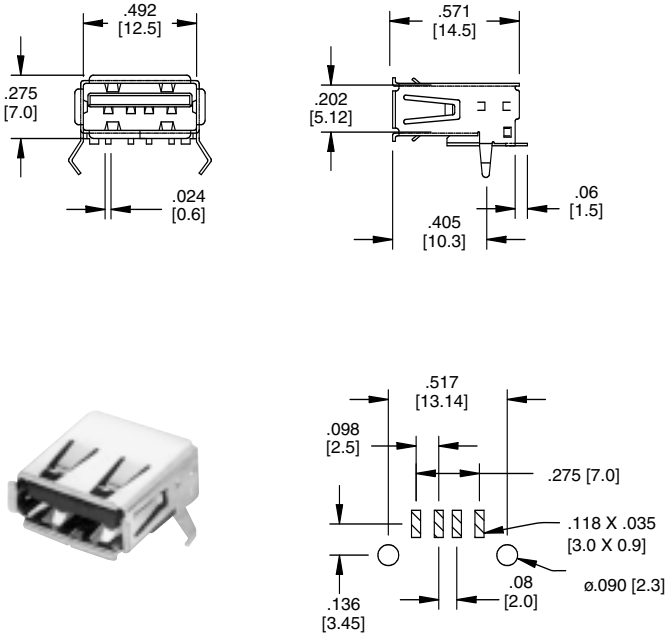
OPTIONS:
Add as Suffix to basic part no.
SMT = Surface Mount Leads with Hi-Temp insulator
30 = 30 µin gold plating in contact area
WT = White color insulator
RC = RoHS compliant lead-free product with Hi-Temp insulator

USB-A-S-RA



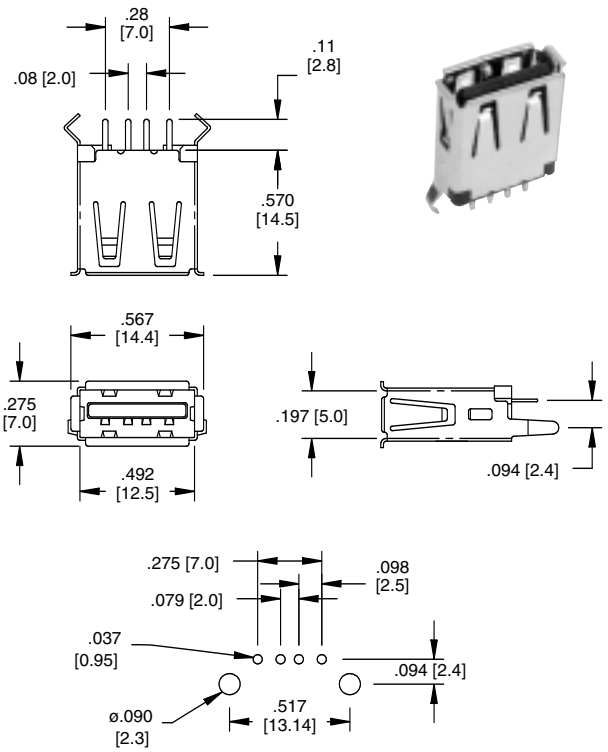
Recommended PCB Layout

USB-A-S-RA-SMT



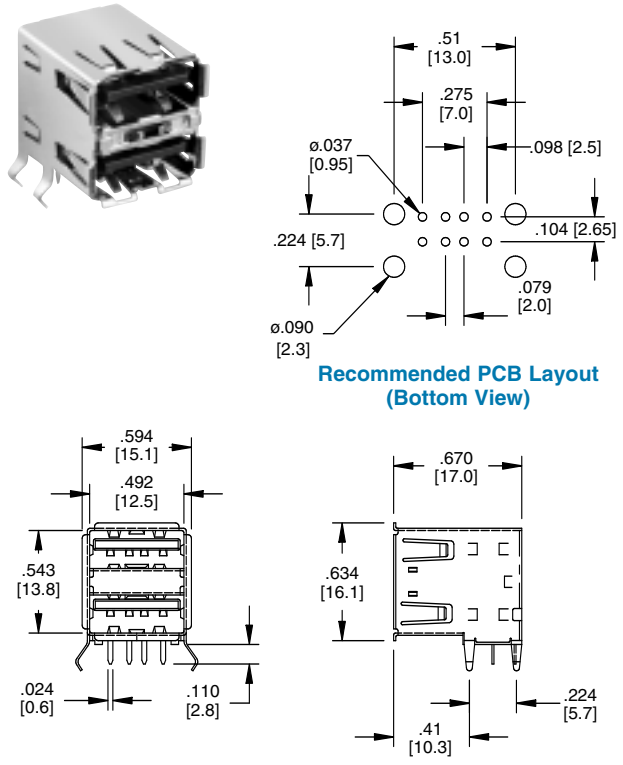
Recommended PCB Layout

USB-A-S-VT



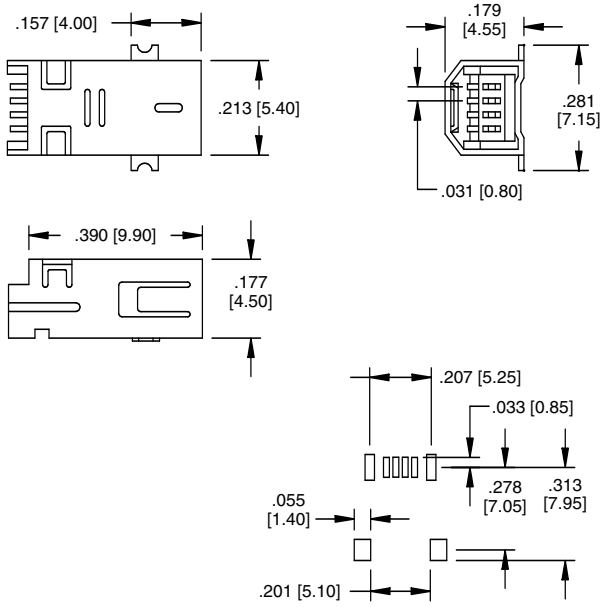
Recommended PCB Layout
(Bottom View)

USB-A-D-RA

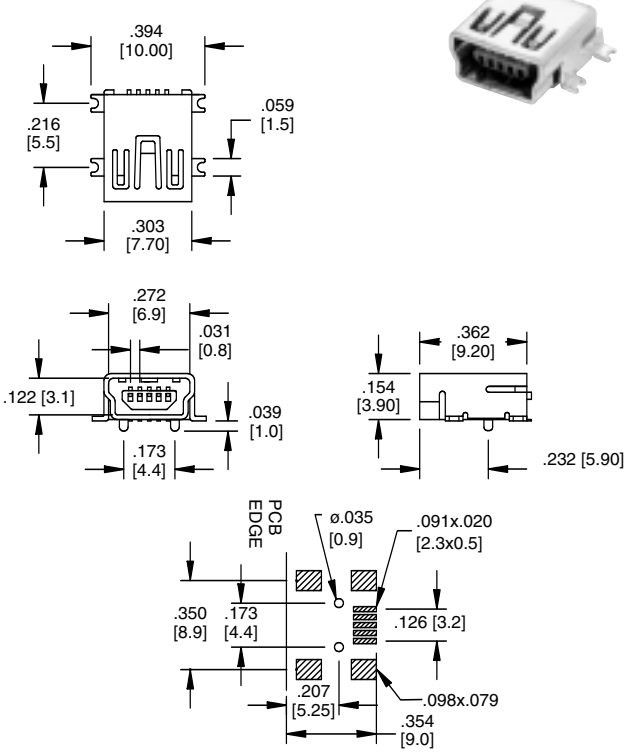


Recommended PCB Layout
(Bottom View)

MUSB-B4-S-RA-SMT



MUSB-B5-S-RA-SMT



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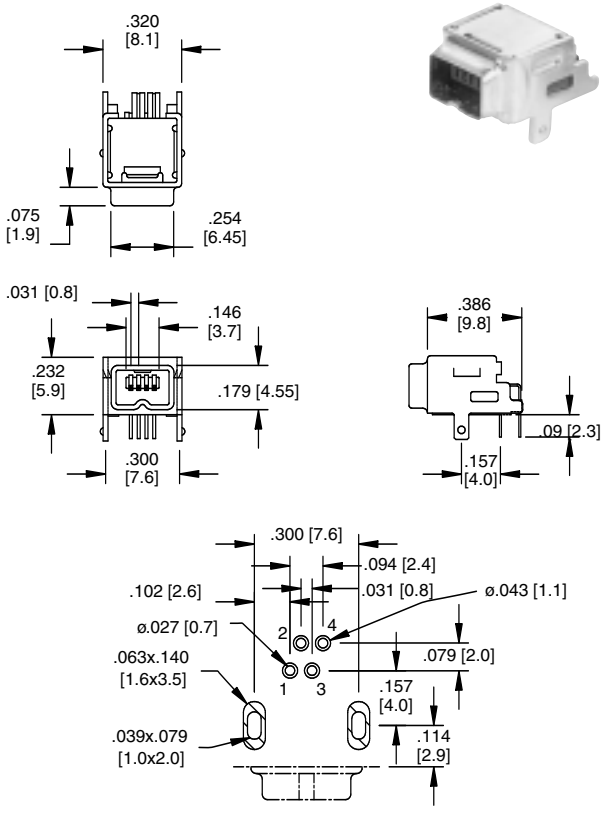

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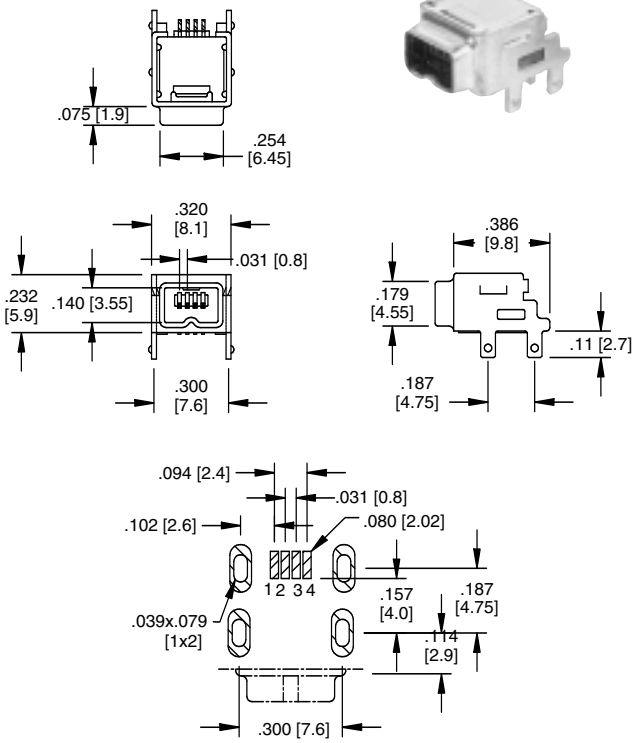

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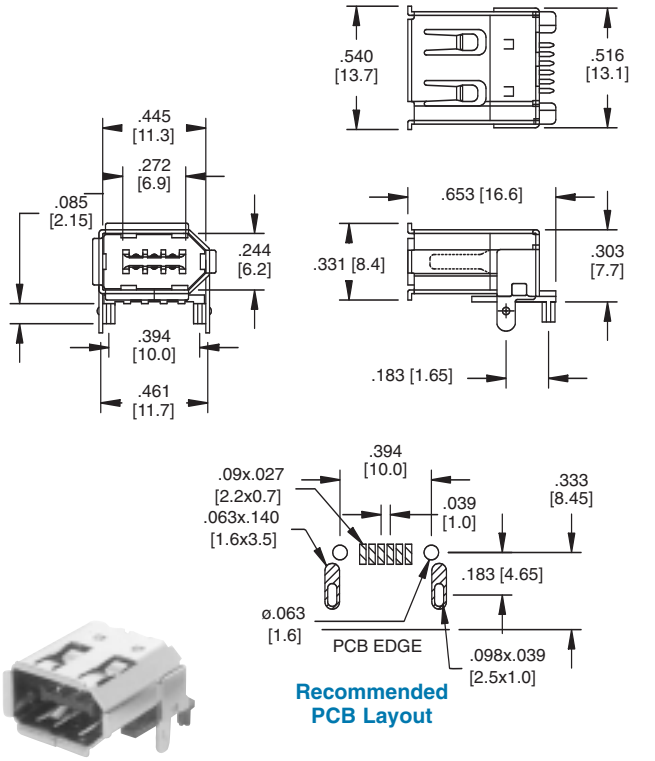
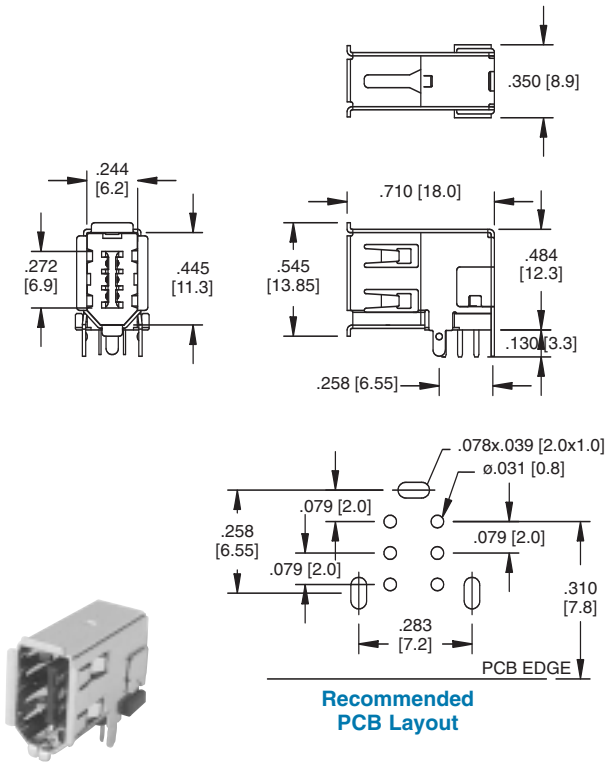
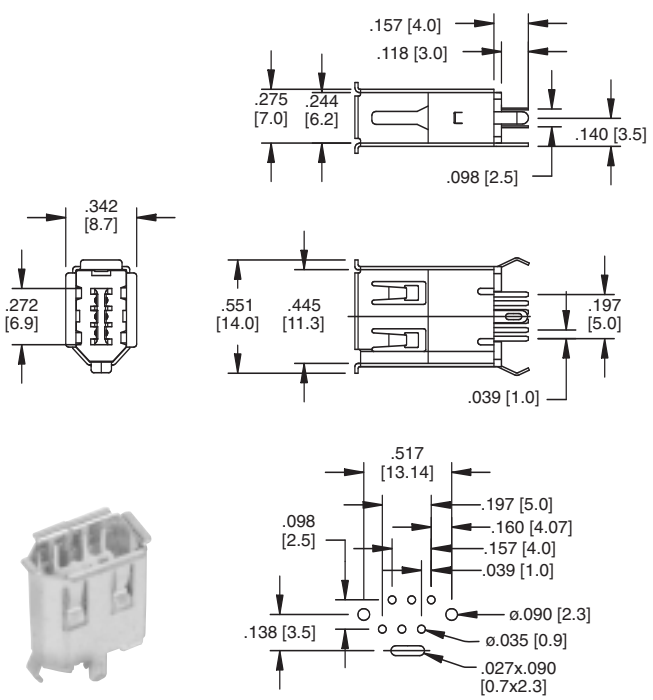


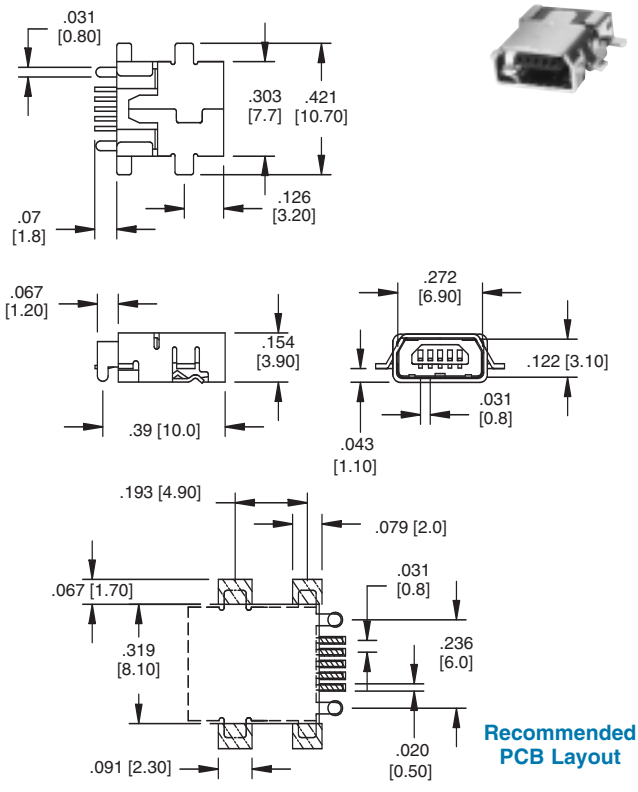
FWC-C-S-RU



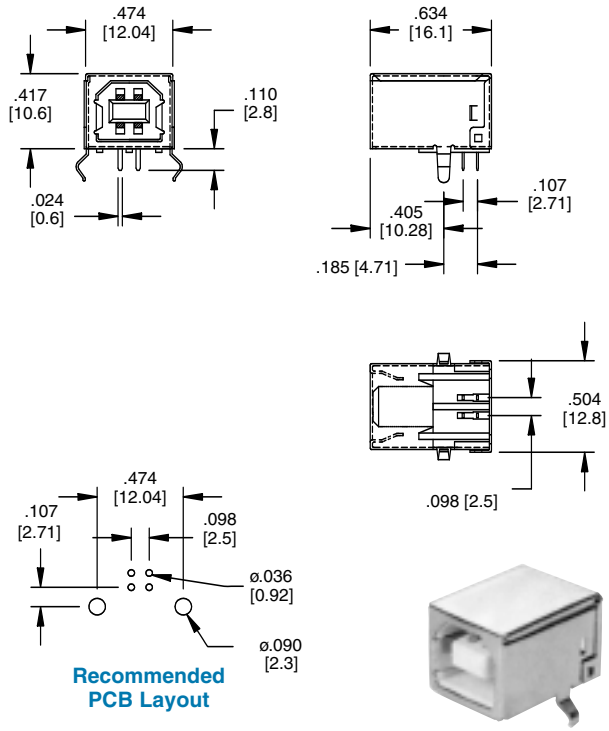
FWC-C-S-VT



MUSB-D-S-RA-SMT



USB-B-S-RA



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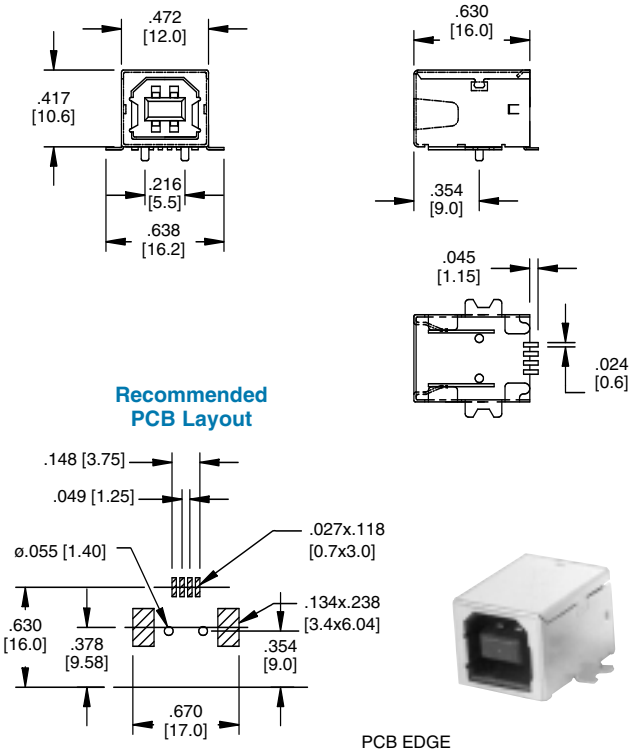
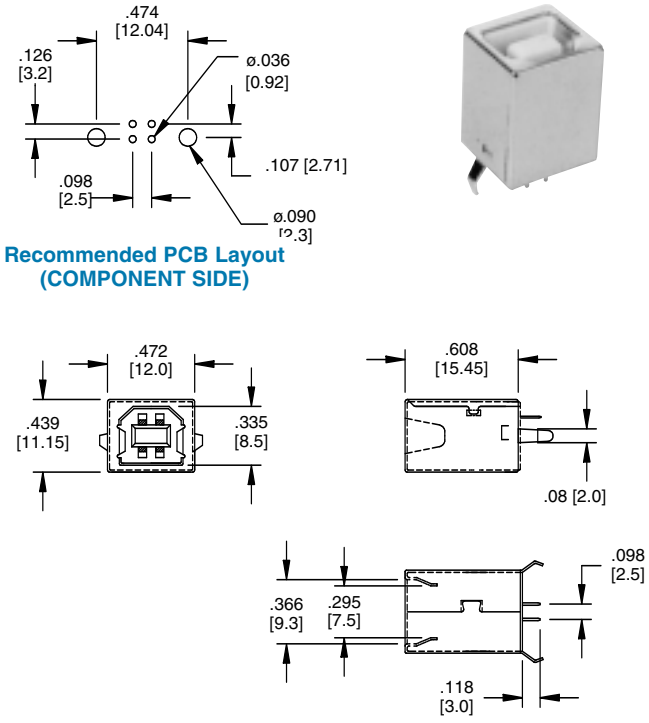


USB-B-S-VT



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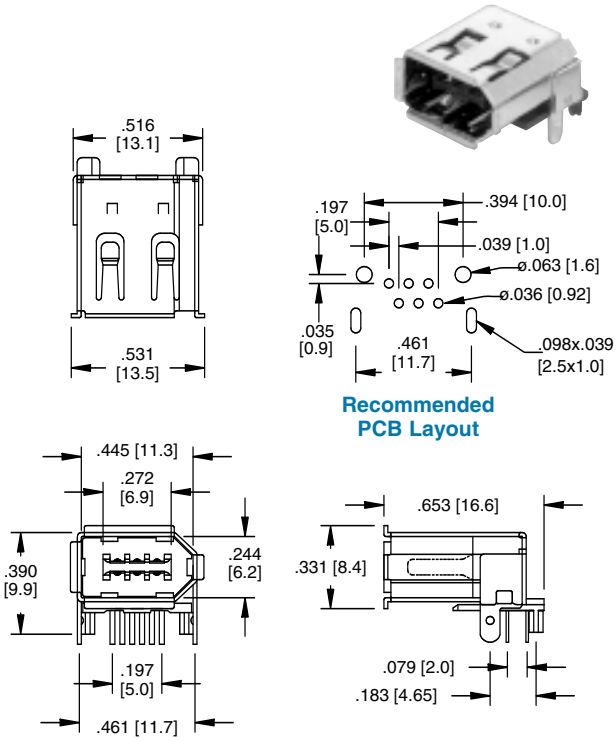
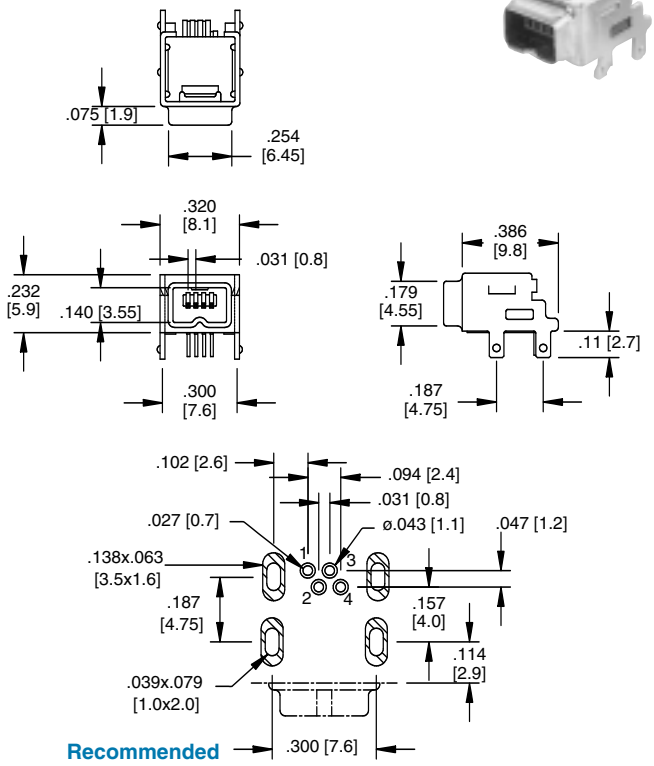


MFW-C-S-RA-2 Reverse PCB Pinout



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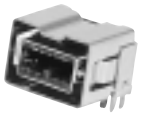

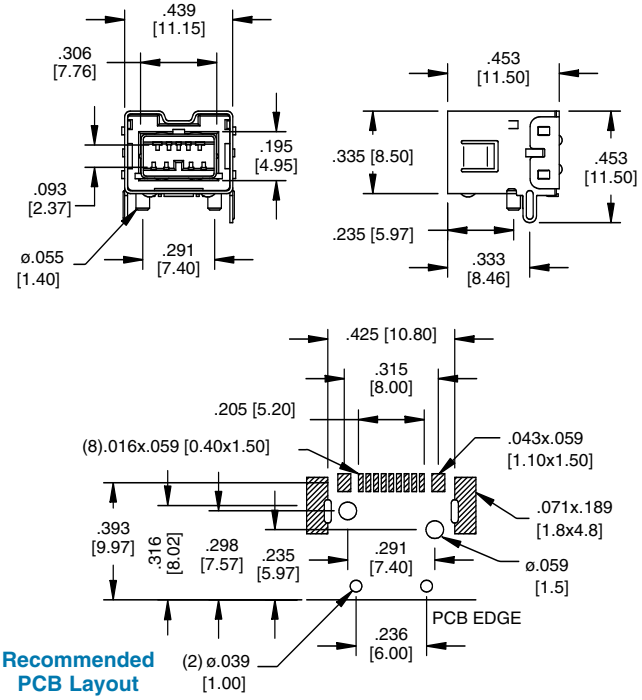

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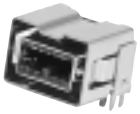

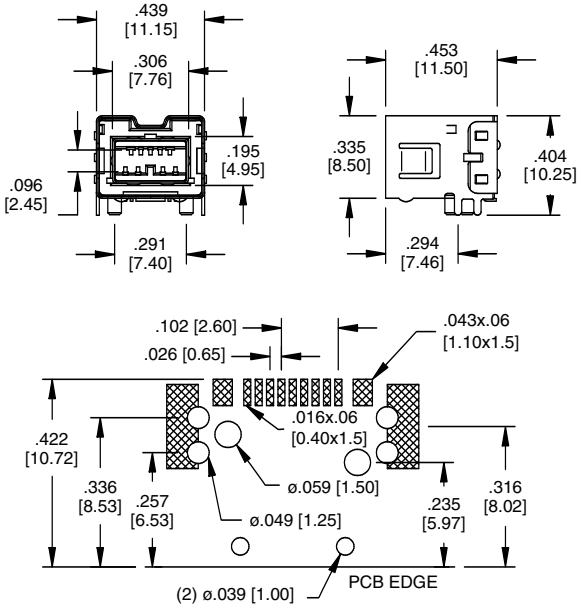
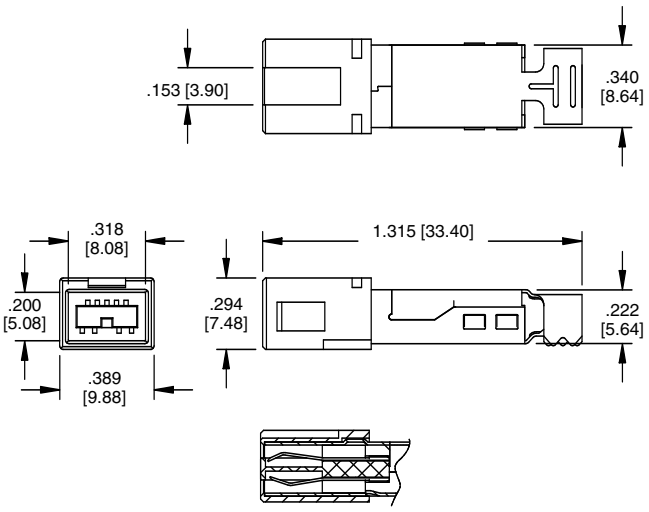
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