



USB-A-D-S-B-TH

USBR-A-S-F-O-TH



USB-AM-S-F-W-TH



USB-A-S-F-B-VU

USB-A, USBR-A, USB-AM SERIES

# STANDARD & RUGGED USB INTERFACES

## SPECIFICATIONS

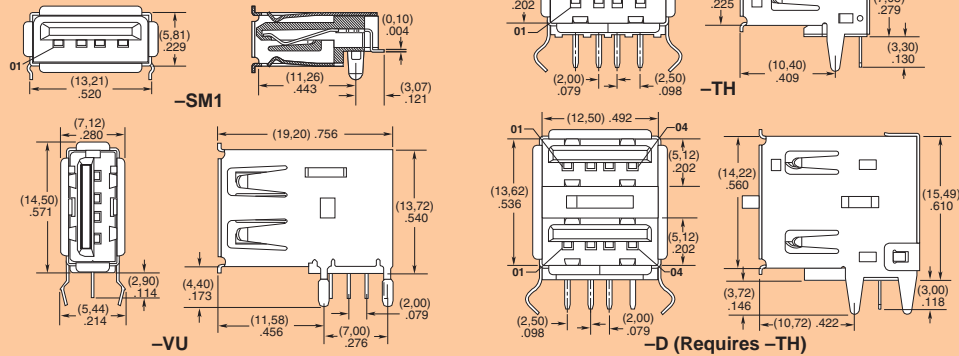
For complete specifications and recommended PCB layouts see [www.samtec.com?USB-A](http://www.samtec.com?USB-A) or [www.samtec.com?USBR-A](http://www.samtec.com?USBR-A)

- Insulator Material:** High Temperature Thermoplastic
- Contact Material:** Phosphor Bronze
- Shell Material:** Copper Alloy
- Plating:** Gold on Contacts, Nickel on Shell, Tin on Tails
- Operating Temp Range:** -50°C to +85°C
- Current Rating:** 1 A per contact
- Voltage Rating:** 30 VAC
- Contact Resistance:** 30 mΩ max
- Cycles:** 1500 (maximum number of cycles tested)
- Packaging:** Packaged and shipped in Bulk Packaging Trays; Trays suitable for automation are available upon request.
- RoHS Compliant:** Yes
- Lead-Free Solderable:** -SM1=Yes, -TH & -VU=Yes (Wave Solder only)



TYPE	A	SHELL TYPE	PLATING	COLOR	TERMINATION
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|--|---|--|---|--|
| <p><b>USB</b><br/>= Standard Connector</p> <p><b>USBR</b><br/>= Increased Retention Connector (Complies with Class 1, DIV II minimum withdrawal requirement of 15N.)</p> | <p><b>-S</b><br/>= Single</p> <p><b>-D</b><br/>= Double (-TH option only)</p> | <p><b>-S</b><br/>= 30µ" (0,76 µm) Gold on Mating Area, Tin on Tails</p> <p><b>-F</b><br/>= Gold Flash on Mating Area, Tin on Tails</p> | <p><b>-B</b><br/>= Black</p> <p><b>-W</b><br/>= White</p> <p><b>-O</b><br/>= Orange (USBR only)</p> | <p><b>-TH</b><br/>= Through-hole</p> <p><b>-SM1</b><br/>= Offset Surface Mount</p> <p><b>-VU</b><br/>= Upright, Through-Hole</p> |
|--|---|--|---|--|



## SPECIFICATIONS

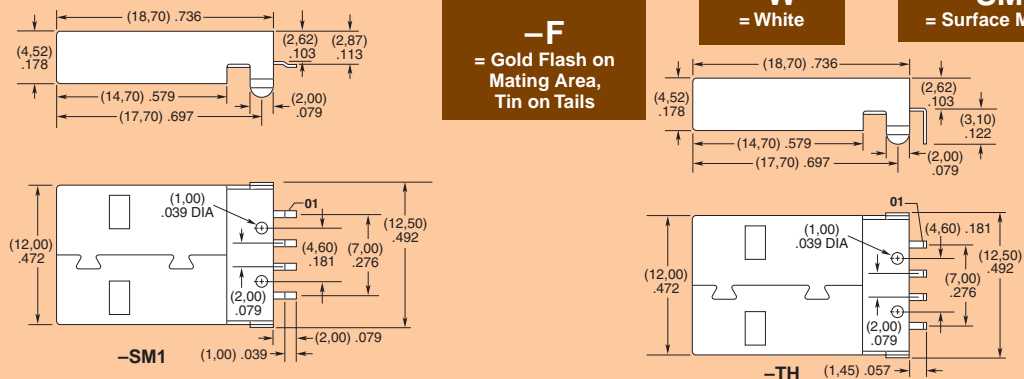
For complete specifications and recommended PCB layouts see [www.samtec.com?USB-AM](http://www.samtec.com?USB-AM)

- Insulator Material:** High Temperature Thermoplastic
- Contact Material:** Phosphor Bronze
- Shell Material:** Copper Alloy
- Plating:** Gold on Contacts, Nickel on Shell, Tin on Tails
- Operating Temp Range:** -50°C to +85°C
- Current Rating:** 1 A per contact
- Voltage Rating:** 30 VAC
- Contact Resistance:** 30 mΩ max
- Cycles:** 1500 (maximum number of cycles tested)
- Packaging:** Packaged and shipped in Bulk Packaging Trays; Trays suitable for automation are available upon request.
- RoHS Compliant:** Yes
- Lead-Free Solderable:** -SM1=Yes, -TH=Yes (Wave Solder only)



USB	TYPE	SHELL TYPE	PLATING	COLOR	TERMINATION
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- |                                       |                               |  |   |   |
|---------------------------------------|-------------------------------|--|---|---|
| <p><b>-AM</b><br/>= A Type (Plug)</p> | <p><b>-S</b><br/>= Single</p> | <p><b>-S</b><br/>= 30µ" (0,76 µm) Gold on Mating Area, Tin on Tails</p> <p><b>-F</b><br/>= Gold Flash on Mating Area, Tin on Tails</p> | <p><b>-B</b><br/>= Black</p> <p><b>-W</b><br/>= White</p> | <p><b>-TH</b><br/>= Through-hole</p> <p><b>-SM1</b><br/>= Surface Mount</p> |
|---------------------------------------|-------------------------------|--|---|---|



Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)