

## USB-B, USBR-B, USBC SERIES

# STANDARD & RUGGED USB INTERFACES

### SPECIFICATIONS

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

#### Insulator Material:

High Temperature Thermoplastic

#### Contact Material:

Phosphor Bronze

#### Shell Material:

Brass

#### Plating:

Gold on Contacts, Nickel on Shell, Tin on Tails

#### Operating Temp Range:

-50°C to +85°C

#### Current Rating:

1A 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:

USB-SM=Yes

USB-TH=Yes

(Wave Solder only)

USBR=Yes (Wave Solder only)



### TYPE

### B

### S

### PLATING

### COLOR

### TERMINATION

### OTHER OPTION

#### USB

= Standard Connector

#### USBR

= Increased Retention Connector (Complies with Class 1, DIV II minimum withdrawal requirement of 15N.)

#### -F

= Gold Flash on Mating Area, Tin on Tails

#### -S

= 30μ" (0.76 μm) Gold on Mating Area, Tin on Tails

-B = Black (USB only)

-W = White (USB only)

-O = Orange (USBR only)

#### -TH

= Through-hole

#### -SM

= Surface Mount

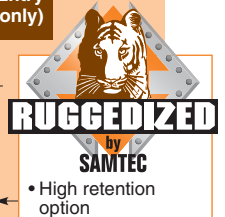
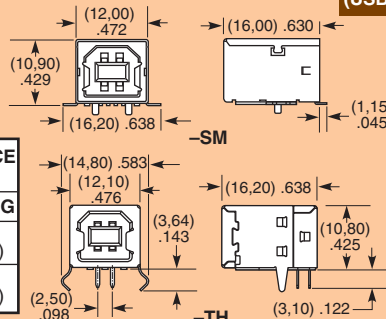
#### -VT

= Vertical Top Entry (USBR Series only)

#### -TR

= Tape and Reel Packaging (-SM only)

MATING / UNMATING FORCE (100 CYCLES)		
SERIES	MATING	UNMATING
USB	5.3 (23,59N)	6.1 (27,15N)
USBR	11.8 (52,51N)	11.5 (51,18N)



### SPECIFICATIONS

For complete specifications see [www.samtec.com?USBC](http://www.samtec.com?USBC)

#### Insulator Material:

Glass Filled Thermoplastic

#### Contact Material:

Copper Alloy

#### Shell Material:

Cold Rolled Steel

((0,30mm) .012" thickness)

#### Plating:

Gold on Contacts, Nickel on Shell, Tin on Tails

#### Operating Temp Range:

0°C to +40°C

#### Current Rating:

1.0A per contact

#### Voltage Rating:

30 VAC (R.M.S.)

#### Contact Resistance:

30 mΩ max

#### Minimum Cycles:

5000

#### RoHS Compliant:

Yes

### USBC

### END NO. 1

### END NO. 2

### B

### B

### PLATING

### WIRE LENGTH

Mates with:  
MUSB, USB,  
USBR

-MA  
= USB Mini A  
Type Plug

-AM  
= USB-A  
Type Plug

-MB  
= USB Mini B  
Type Plug

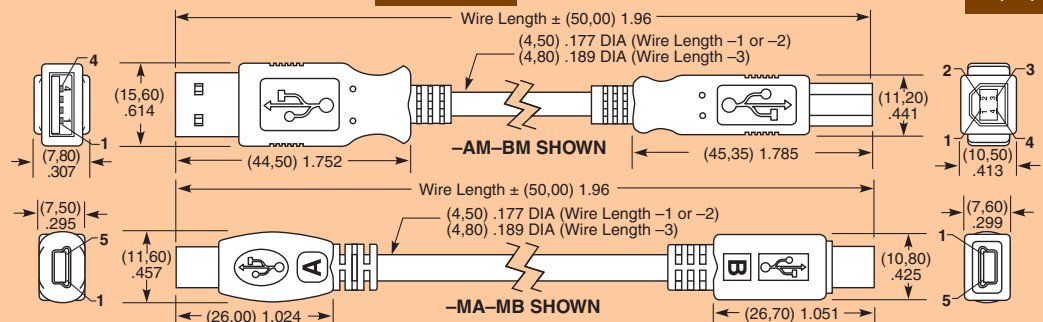
-BM  
= USB-B  
Type Plug  
(N/A with -MA)

-S  
= 30μ" (0.76μm)  
Gold on contact area

-1  
= (1m) 39.37"

-2  
= (2m) 78.74"

-3  
= (3m) 118.11"



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

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