

**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)

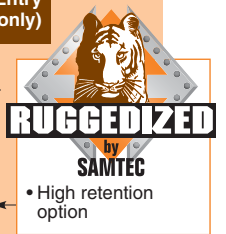
**Insulator Material:** High Temperature Thermoplastic  
**Contact Material:** Phosphor Bronze  
**Shell Material:** Brass  
**Plating:** Gold on Contacts, Nickel on Shell, Tin on Tails  
**Operating Temp Range:** -50°C to +85°C  
**Current Rating:** 1A per contact  
**Voltage Rating:** 30 VAC  
**Contact 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
<b>USB</b> = Standard Connector						
<b>USBR</b> = Increased Retention Connector (Complies with Class 1, DIV II minimum withdrawal requirement of 15N.)						
		<b>-F</b> = Gold Flash on Mating Area, Tin on Tails				
		<b>-S</b> = 30µ" (0,76 µm) Gold on Mating Area, Tin on Tails				
			<b>-B</b> = Black (USB only)			
			<b>-W</b> = White (USB only)			
			<b>-O</b> = Orange (USBR only)			
				<b>-TH</b> = Through-hole		
				<b>-SM</b> = Surface Mount		
				<b>-VT</b> = Vertical Top Entry (USBR Series only)		
					<b>-TR</b> = Tape and Reel Packaging (-SM only)	

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
	<b>-MA</b> = USB Mini A Type Plug	<b>-MB</b> = USB Mini B Type Plug				
	<b>-AM</b> = USB-A Type Plug	<b>-BM</b> = USB-B Type Plug (N/A with -MA)			<b>-S</b> = 30µ" (0,76µm) Gold on contact area	
						<b>-1</b> = (1m) 39.37"
						<b>-2</b> = (2m) 78.74"
						<b>-3</b> = (3m) 118.11"

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