



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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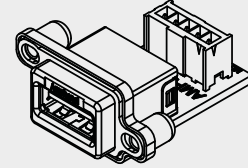
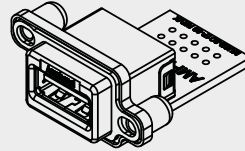
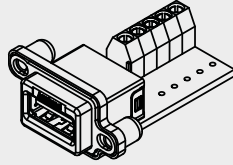
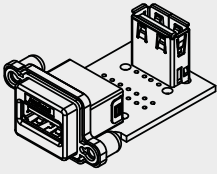
## Generation 2 Features

- Provides a standard USB interface ideal for harsh environments where Ethernet/IP Protocol is used
- Protection is provided for IP68 applications per IEC 60529 specification
- Reaches Data Rates up to 480Mbps (USB 2.0)
- Features an Epoxy-free assembly; sealed with O-rings & gaskets
- More robust construction with improved thermal cycling and a slim conductive panel gasket for enhanced EMI performance



## Markets

Amphenol's line of Rugged USB connectors serve many markets and applications across the globe including Transportation, Military, Medical and Industrial.



Photos Shown: MUSBR-A311-XX, MUSBR-A411-XX, MUSBR-AA11-XX, MUSBR-AB11-XX

## Technical Specifications

<b>External Shell:</b>	Die Cast Zinc, Nickel Plated
<b>Insulator Housing:</b>	High Temperature Resistant Engineering Thermoplastic, Glass Reinforced, UL94V-0, Black
<b>Contacts:</b>	Phosphor Bronze, Plated with 0.76 $\mu$ m (30 $\mu$ ”) min Gold over 1.27 $\mu$ m (50 $\mu$ ”) min Nickel on the Mating Area and 2.54 $\mu$ m (100 $\mu$ ”) min Matte Tin over Nickel on the Contact Tails
<b>Internal Shield &amp; Rear Shield:</b>	Stainless Steel, Passivated
<b>Panel Gasket:</b>	Conductive Silicone Rubber, Black
<b>Internal O-ring:</b>	Silicone Rubber, Beige
<b>PCB:</b>	FR4 Fibreglass, Lead Free
<b>Additional Connector:</b>	UL Recognized Component
<b>UL Recognition:</b>	Level DUXR2, File Number E135615, see Listing
<b>Water &amp; Dust Protection Level:</b>	Code IP67 per IEC 60529
<b>Operating Temperature:</b>	-40°C to +105°C
<b>Insertion Force:</b>	Per EIA-364-13, 35N (7.9lb <sub>f</sub> ) max
<b>Extraction Force:</b>	Per EIA-364-13, <i>Standard A</i> - 10N (2.2lb <sub>f</sub> ) min <i>Mini</i> - 7N (1.6lb <sub>f</sub> ) min Initial, 3N (0.7lb <sub>f</sub> ) min after Durability
<b>Durability:</b>	Per EIA 364-09, <i>Standard A</i> - 1500 Mating Cycles <i>Mini</i> - 5000 Mating Cycles
<b>Vibration:</b>	Per EIA 364-28 Random Condition V, Letter A, No Discontinuity $\geq 1\mu$ s
<b>Shock:</b>	Per EIA 364-27 Test Condition H (11 ms, 30, 1/2 Sine), No Discontinuity $\geq 1\mu$ s
<b>Temperature Life w/o Load:</b>	Per EIA-364-17, 105°C, 1000 Hours
<b>Thermal Shock:</b>	Per EIA-364-32, -40°C to +125°C, 5 Cycles
<b>Humidity:</b>	Per EIA 364-31, 10 Cycles, 240 Hrs, 25°C to 65°C 90-95%RH, with -10C Cold Shock
<b>Mixed Flowing Gas:</b>	Per EIA 364-65 Class IIA (Cl <sub>2</sub> , NO <sub>2</sub> , H <sub>2</sub> S & SO <sub>2</sub> ), 14 Day Exposure
<b>Solvent Resistance:</b>	Isopropyl Alcohol & 5% Sodium Hydroxide Solution, 24 Hrs Each
<b>Solderability:</b>	Per EIA-364-52, 95% Coverage after Category 2 Steam Aging
<b>Current Rating:</b>	<i>Standard A</i> - 30 mA max per Contact ( $\Delta T \leq 30^\circ\text{C}$ ) <i>Mini</i> - 1A max per Contact ( $\Delta T \leq 30^\circ\text{C}$ )
<b>Contact Resistance:</b>	<i>Standard A</i> - 30 m $\Omega$ max <i>Mini</i> - 50 m $\Omega$ max
<b>Insulation Resistance:</b>	<i>Standard A</i> - 1000 M $\Omega$ min <i>Mini</i> - 100 M $\Omega$ min
<b>DWV:</b>	<i>Standard A</i> - 500 VAC rms <i>Mini</i> - 100 VAC rms