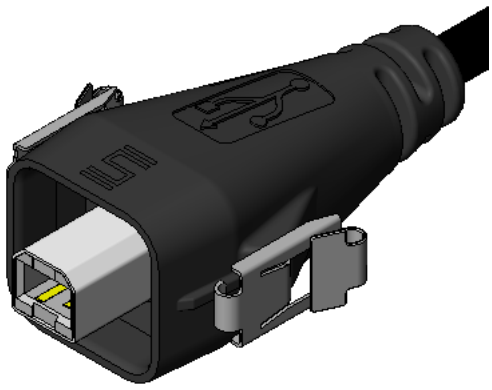
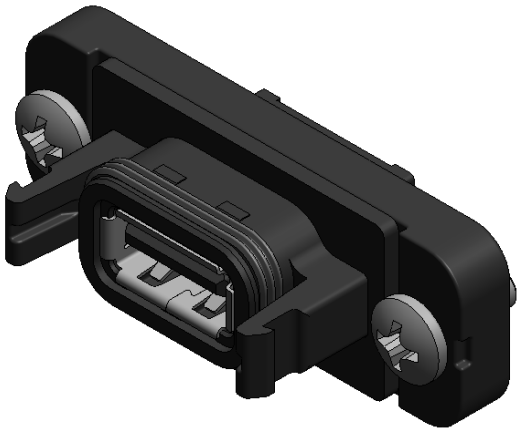
Series: RCU AccliMate™ IP68 Sealed Rectangular USB Cable Assembly System

RCU Series – USB A Type

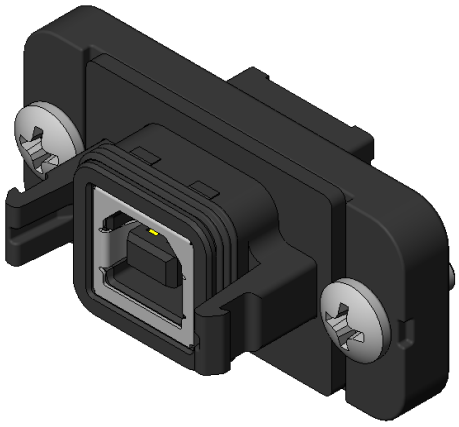
RCU Series – USB B Type



RPBU Series – USB A Type

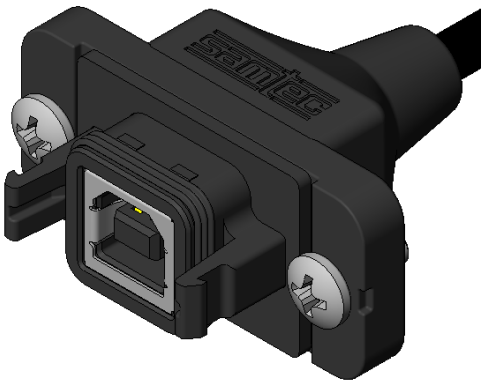


RPBU Series – USB B Type



RPCU Series – USB A Type

RPCU Series – USB B Type



Other configurations available for:

USB A, USB B, sealed, unsealed, panel mount version, dust caps

See www.samtec.com for more information.

1.0 SCOPE

This specification covers performance, testing and quality requirements for Samtec RCU Series AccliMate™ IP68 Sealed Rectangular USB Cable Assembly System.

2.0 DETAILED INFORMATION

2.1 Product prints, catalog pages, test reports and other specific, detailed information can be found at http://www.samtec.com/?RCU, http://www.samtec.com/?RPBU and http://www.samtec.com/?RPCU.

3.0 TESTING

3.1 Current Rating: 4.5 A (One Pin Powered)
3.2 Voltage Rating: 300 VAC
3.3 Ingress Protection: IP68
3.4 Operating Temperature Range: -20°C to +80°C
3.5 Electrical:

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Withstanding Voltage	EIA-364-20 (No Flashover, Sparkover, or Breakdown)	900 VAC	Pass
Insulation Resistance	EIA-364-21 (5000 MΩ minimum)	5,000 MΩ	Pass
Contact Resistance (LLCR)	EIA-364-23	Δ 15 mΩ maximum (Samtec defined)/ No damage	Pass

3.6 Mechanical:

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Durability	EIA-364-09C	100 cycles	Pass
Random Vibration	EIA-364-28 Condition V, Letter B 7.56 G 'RMS', 50 to 2000 Hz, 2 hours per axis, 3 axis total , PSD 0.04	Visual Inspection: No Damage LLCR: Δ 15 mΩ maximum	Pass
Mechanical Shock	EIA-364-27 100 G, 6 milliseconds, sawtooth wave, 11.3 fps, 3 shocks/direction, 3 axis (18 total shocks)	Visual Inspection: No Damage LLCR: Δ 15 mΩ maximum	Pass
Normal Force	EIA-364-04	30 grams minimum for Gold interface	Pass

3.7 Environmental:

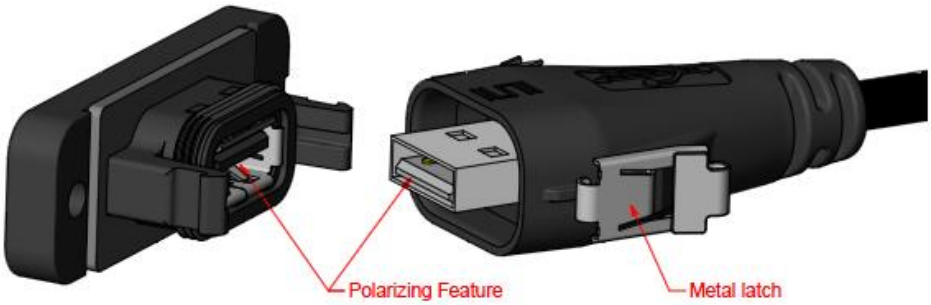
ITEM	TEST CONDITION	REQUIREMENT	STATUS
Thermal Shock	EIA-364-32 Thermal Cycles: 100 (30 minute dwell) Hot Temp: +85°C Cold Temp: -55°C Hot/Cold Transition: Immediate	Visual Inspection: No Damage LLCR: Δ 15 mΩ DWV: 900 VAC IR: >5,000 MΩ	Pass
Thermal Aging (Temp Life)	EIA-364-17 Test Condition 4 @ 105°C Condition B for 250 hours	Visual Inspection: No Damage LLCR: Δ 15 mΩ DWV: 900 VAC IR: >5,000 MΩ	Pass
Cyclic Humidity	EIA-364-31 Test Temp: +25°C to +65°C Relative Humidity: 90 to 95% Test Duration: 240 hours	Visual Inspection: No Damage LLCR: Δ 15 mΩ DWV: 900 VAC IR: >5,000 MΩ	Pass
Gas Tight	EIA-364-36 Gas Exposure: Nitric Acid Vapor Duration: 60 min. Drying Temp.: 50°C +/- 3°C Measurements: Within 1 hour of Exposure	LLCR: Δ 15 mΩ	Pass
IP68	Dust/Water Testing per CEI/IEC 60529	Visual: No dust or water present 30 mins @ 10 Meters	Pass

4.0 MATED SYSTEM

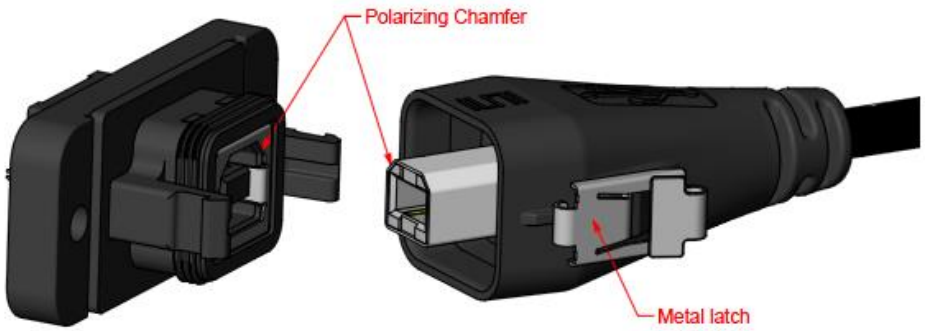
Mated view information can be found at link below:
http://www.samtec.com/documents/webfiles/cpdf/RCU%20Mated%20Document.pdf

5.0 POLARIZING FEATURES

USB A TYPE



USB B TYPE



6.0 ADDITIONAL RESOURCES

6.1 For additional mechanical testing or product information, contact our Customer Engineering Support Group at **CES@samtec.com**

6.2 For RoHS, REACH or other environmental compliance information, contact our Product Environmental Compliance Group at **PEC@samtec.com**

USE OF PRODUCT SPECIFICATION SHEET

This Product Specification Sheet ("PSS") is a brief summary of information related to the Product identified. As a summary, it should only be used for the limited purpose of considering the purchase/use of Product. For specific, detailed information, including but not limited to testing and Product footprint, refer to Section 2.0 of this document and the links there provided to test reports and prints. This PSS is the property of Samtec, Inc. ("Samtec") and contains proprietary information of Samtec, our various licensors, or both. Samtec does not grant express or implied rights or license under any patent, copyright, trademark or other proprietary rights and the use of the PSS for building, reverse engineering or replication is strictly prohibited. By using the PSS, the user agrees to not infringe, directly or indirectly, upon any intellectual property rights of Samtec and acknowledges that Samtec, our various licensors, or both own all intellectual property therein. The PSS is presented "AS IS". While Samtec makes every effort to present excellent information, the PSS is only provided as a guideline and does not, therefore, warrant it is without error or defect or that the PSS contains all necessary and/or relevant information about the Product. The user agrees that all access and use of the PSS is at its own risk. **NO WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY KIND WHATSOEVER ARE PROVIDED.**