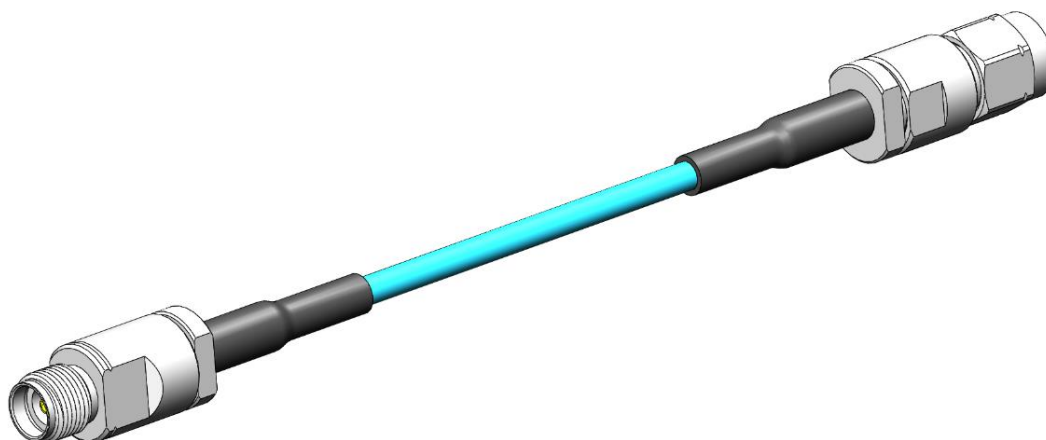
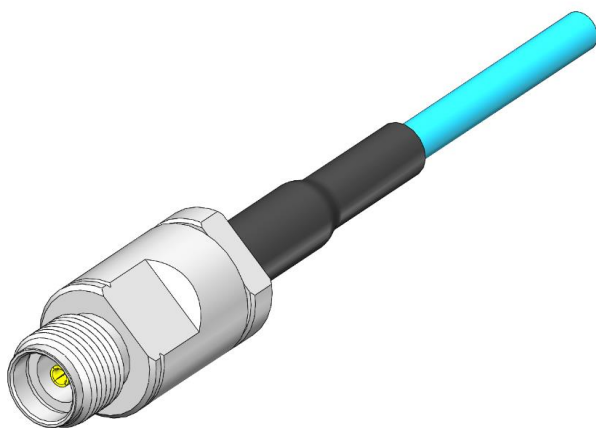


Series: RF23S Solid Dielectric, 23 AWG Microwave Cable Assembly

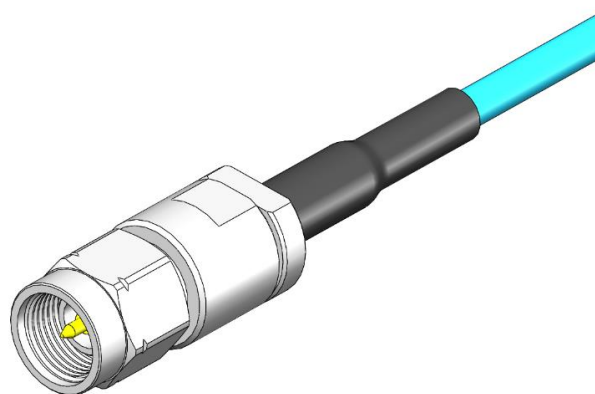
RF23S 3.5 mm End Cable Assembly



-35SJP END



-35SP END



See www.samtec.com for more information.

Series: RF23S Solid Dielectric, 23 AWG Microwave Cable Assembly

1.0 SCOPE

1.1 This specification covers performance, testing and quality requirements for Samtec RF23S Series Solid Dielectric, 23 AWG Microwave Cable Assembly with 3.5 mm end.

2.0 DETAILED INFORMATION

2.1 Product prints, footprints, catalog pages, test reports and other specific, detailed information can be found at <https://www.samtec.com/products/rf23s>.

3.0 TESTING

3.1 **Voltage Rating:** 375 VAC

3.2 **Operating Temperature Range:** -40°C to +165°C

3.3 **Operating Humidity Range:** Up to 95% (Per EIA-364-31)

3.4 Electrical:

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Withstanding Voltage	EIA-364-20 (No Flashover, Sparkover, or Breakdown)	1125 VAC	Pass
Insulation Resistance	EIA-364-21 (1000 MΩ minimum)	1000 MΩ	Pass
Contact Resistance (LLCR)	EIA-364-23	Δ 15 mΩ maximum (Samtec defined)/ No damage	Pass

3.5 Mechanical:

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Durability	EIA-364-09C ((By hand; Rotate Plug coupling nut only. Do not rotate entire assembly; Torque each time to 8 in-lbs)	500 cycles	Pass
Insertion Force	Mating Pin = 0.940mm +.002/- .000 IEEE Spec = IEEE-287 (2007) Reference Print Spec: Max Allowable Insertion Force: 5.6N	2.62N / 0.59Lbs	Pass
Withdrawal Force	Mating Pin = 0.902mm +.000/- .002 IEEE Spec = IEEE-287 (2007) Reference Print Spec: Min. Allowable Withdrawal Force: 0.55N	1.4N / 0.33Lbs	Pass
Normal Force	EIA-364-04	30 grams minimum for Gold interface	Pass

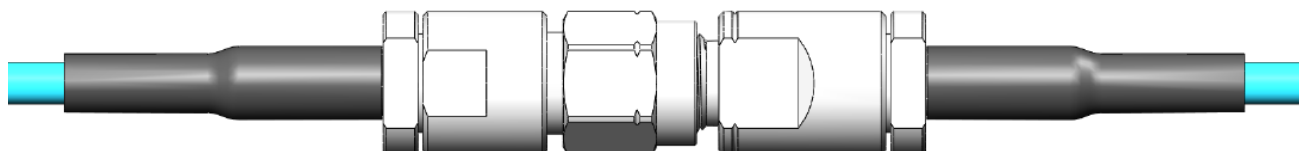
Series: RF23S Solid Dielectric, 23 AWG Microwave Cable Assembly

3.6 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 m Ω DWV: 1125 VAC IR: >10,000 M Ω	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 m Ω	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 m Ω DWV: 1125 VAC IR: >10,000 M Ω	Pass

4.0 MATED SYSTEM

4.1 Orientations



35SJP END TO 35SPP END

Series: [RF23S Solid Dielectric, 23 AWG Microwave Cable Assembly](#)

5.0 HIGH SPEED PERFORMANCE

5.1 Frequency Range:

Connector	Frequency Range
RF23S 3.5 mm End	0-34 GHz

5.2 Impedance: 50 ohm

5.3 V.S.W.R: <1.3 @ 34GHz

6.0 APPLICATION INFORMATION

6.1 Min Cable Bend Radius: MWC-2350-01= .350" [8.89mm]

6.2 Cable Management: Samtec recommends some form of cable management to prevent non-axial forces being applied to the connector.

7.0 ADDITIONAL RESOURCES

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

7.2 For additional information on high speed performance testing, contact our Signal Integrity Group at SIG@samtec.com

7.3 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**