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1.0 SCOPE

This specification covers performance, test and quality requirements for Samtec's BE40A Series, 40GHz, Bulls Eye ®: Double Row, High-Performance Test System including the BE40C Series Replacement Cable and BE40B Series Replacement Block.

2.0 DETAILED INFORMATION

2.1 Product prints, footprints, catalog pages, test reports and other specific, detailed information can be found at

BE40A: https://www.samtec.com/products/be40a
BE40B: https://www.samtec.com/products/be40a
BE40C: https://www.samtec.com/products/be40a

3.0 TESTING

3.1 Voltage Rating: 165 VAC

3.2 Operating Temperature Range: -65°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)	510 VAC	Pass
Insulation Resistance	EIA-364-21 (1000 MΩ minimum)	1,000 ΜΩ	Pass
Contact Resistance (LLCR)	EIA-364-23	Δ 15 m Ω maximum (Samtec defined)/ No damage	Pass

3.5 Mechanical:

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Durability	EIA-364-09C	1000 cycles	Pass
Normal Force	EIA-364-04	30 grams minimum for Gold interface	Pass

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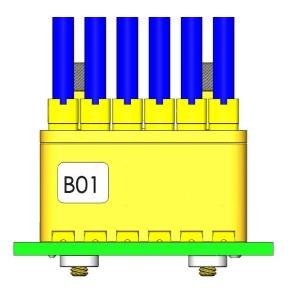


3.6 Environmental:

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: 510 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: 510 VAC IR: >10,000 M Ω	Pass

4.0 MATED SYSTEM

4.1 Orientations



BE40A MATED WITH PCB

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5.0 HIGH SPEED PERFORMANCE

5.1 Frequency Range:

Connector	Frequency Range
BE40x 2.92 mm End	0-40 GHz

5.2 Impedance: 50 ohm

5.3 Return Loss: <-13.97db@ 40GHz

6.0 APPLICATION INFORMATION

6.1 Min Cable Bend Radius: MWC-2350CU-01= .125" [3.175mm]

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
- 7.4 For additional information, contact our RF Group @ 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

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