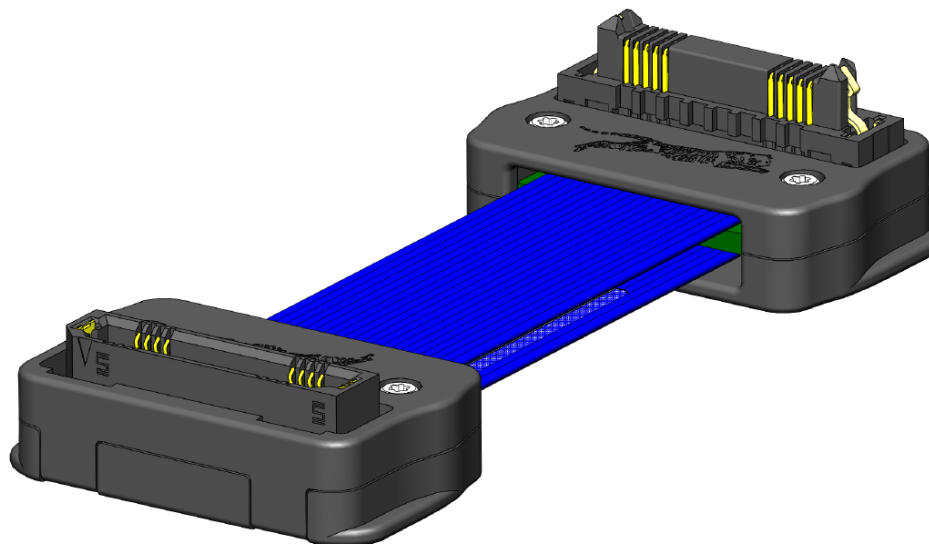
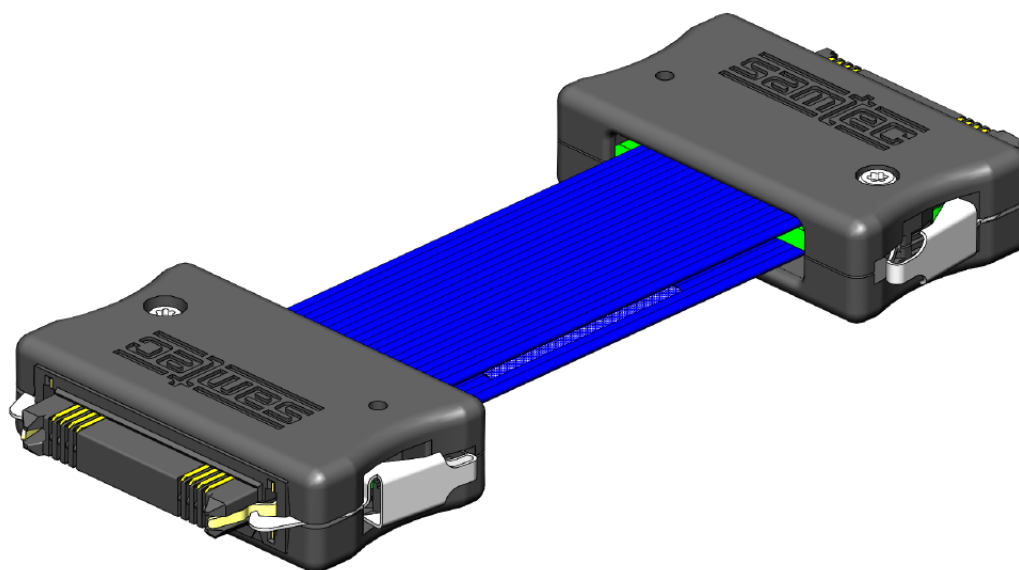


Series: ERCD 0,80 mm (.0315") Edge Rate[®] Coax Cable Assembly

ERCD Series – STL/TTR End Options with Friction Latch



ERCD Series – TED/TEU End Options with Squeeze Latch



Other configurations available for:

END OPTIONS: -TTL, -TBL, -STR, -SBR, -SBL

LATCH OPTIONS: SQUEEZE LATCH, FRICTION LATCH, NO HOUSING, SCREW OPTION

See www.samtec.com for more information.



Series: ERCD 0,80 mm (.0315") Edge Rate[®] Coax Cable Assembly

1.0 SCOPE

1.1 This specification covers performance, testing and quality requirements for Samtec ERCD 0,80 mm (.0315") Edge Rate[®] Coax Cable Assembly. This cable assembly is available in squeeze latch, friction latch, no housing, and screw option applications.

2.0 DETAILED INFORMATION

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

3.0 TESTING

3.1 Current Rating: 1.3A (1 Pin Powered per Row)

3.2 Voltage Rating: 235 VAC

3.3 Operating Temperature Range: -25°C to +105°C

3.4 Electrical:

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Withstanding Voltage	EIA-364-20 (No Flashover, Sparkover, or Breakdown)	213 VAC	Pass
Insulation Resistance	EIA-364-21 (1000 M Ω minimum)	1,000 M Ω	Pass
Contact Resistance (LLCR)	EIA-364-23	Δ 15 m Ω (Samtec defined)/ No damage	Pass

3.5 Mechanical:

ITEM	TEST CONDITION	RESULT	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 Nanosecond Event Detection: EIA-364-87	Visual Inspection: No Damage LLCR: Δ 15 m Ω No Events	Pass
Mechanical Shock	EIA-364-27 100 G, 6 milliseconds, Half Sine wave, 12.3 fps, 3 shocks/direction, 3 axis (18 total shocks) Nanosecond Event Detection: EIA-364-87	Visual Inspection: No Damage LLCR: Δ 15 m Ω No Events	Pass
Normal Force	EIA-364-04	30 grams minimum for Gold interface	Pass

Series: ERCD 0,80 mm (.0315") Edge Rate[®] Coax Cable Assembly

Cable Flex	EIA-364-41D, Flat Cable to be tested 70°±5° each direction (140°±10° total)	500 cycles minimum	Pass
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3.6 Environmental:

ITEM	TEST CONDITION	RESULT	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: 213 VAC IR: >1,000 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	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: 213 VAC IR: >1,000 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

4.0 MATED SYSTEM

4.1 For application details, please visit <http://suddendocs.samtec.com/prints/erxx%20applications-mkt.pdf>.

4.2 Mating connector requirement: The mating ERF8/ERM8 connector must include -L (Latching) option.

Series: ERCD 0,80 mm (.0315") Edge Rate® Coax Cable Assembly

5.0 HIGH SPEED PERFORMANCE

5.1 Based on a 7dB insertion loss

5.2 **System Impedance:** 50 ohm single-ended

Assembly			-7 dB Frequency
ERCD-020-09.00-TTR-STL-1-D	Single Ended	Long Row	4.0 GHz
		Short Row	7.5 GHz
	Differential	Long Row	8.5 GHz
		Short Row	10.0 GHz
ERCD-020-39.37-TTR-STL-1-D	Single Ended	Long Row	2.5 GHz
		Short Row	2.5 GHz
	Differential	Long Row	5.0 GHz
		Short Row	4.5 GHz

Assembly			-7 dB Frequency
ERCD-020-09.80-TTR-STL-2-D	Single Ended	Long Row	4.0 GHz
		Short Row	6.5 GHz
	Differential	Long Row	8.0 GHz
		Short Row	8.0 GHz
ERCD-020-39.37-TTR-STL-2-D	Single Ended	Long Row	2.5 GHz
		Short Row	2.5 GHz
	Differential	Long Row	5.5 GHz
		Short Row	5.0 GHz

Assembly			-7 dB Frequency
ERCD-020-09.80-TTR-TED-1-D	Single Ended	Long Row	3.5 GHz
		Short Row	6.0 GHz
	Differential	Long Row	8.5 GHz
		Short Row	11.0 GHz
ERCD-020-39.37-TTR-TED-1-D	Single Ended	Long Row	2.5 GHz
		Short Row	2.5 GHz
	Differential	Long Row	5.0 GHz
		Short Row	4.5 GHz

Assembly			-7 dB Frequency
ERCD-020-09.80-TTR-TED-2-D	Single Ended	Long Row	3.5 GHz
		Short Row	5.5 GHz
	Differential	Long Row	9.0 GHz
		Short Row	11.5 GHz
ERCD-020-39.37-TTR-TED-2-D	Single Ended	Long Row	2.5 GHz
		Short Row	2.5 GHz
	Differential	Long Row	5.0 GHz
		Short Row	4.5 GHz

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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 additional information on high speed performance testing, contact our Signal Integrity Group at SIG@samtec.com
- 6.3 For additional application information, contact our High Speed Cable Group at HDR@samtec.com
- 6.4 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.**