

**Internal HD Mini SAS Cable Assembly**

**1. SCOPE**

1.1. Content

This specification defines the performance, tests, and quality requirements for Internal HD Mini SAS cable assembly, with round jacketed cable.

1.2. Qualification

When tests are performed on the subject product line, procedures specified in Figure 1 shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

**2. APPLICABLE DOCUMENTS AND FORMS**

The following documents and forms constitute a part of this specification to the extent specified herein. Unless otherwise indicated, the latest edition of the document applies.

2.1. TE Documents

- [501-134041](#): Qualification Test Report
- [108-32038](#): Product Specification (Internal Mini SAS HD Connector System)
- [501-134037](#): Qualification Test Report (Internal Mini SAS HD connector System)
- 2820357-1: Cable Assembly Drawing, Internal HD Mini SAS, Straight to Right Angle Connectors, Harness, Oracle P/N 7095801

2.2. Industry Documents

- EIA-364 “Electrical Connector/Socket Test Procedures Including Environmental Classification”
- SFF-8417 Multi Conductor Cable Flex Cycle Life Test Procedure

2.3. Reference Document

- [109-197](#) Test Specification (TE Test Specification vs EIA and IEC Test Methods)

**3. REQUIREMENTS**

3.1. Design and Construction

Product shall be of the design, construction, materials and physical dimensions specified on the applicable product drawing.

3.2. Ratings

Voltage	Current	Temperature
30 VDC per contact	0.5A per contact	0°C to 80°C

3.3. Test Requirements and Procedures Summary

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

TEST DESCRIPTION	REQUIREMENT	PROCEDURE
Initial examination of product	Meets requirements of product drawing.	EIA 364-18 Visual and dimensional (c of c) inspection per product drawing
Final examination of product	Meets visual requirements.	EIA 364-18 Visual Inspection
<b>ELECTRICAL</b>		
High Speed Test	Conforms to SAS 3.0 SI requirements	EIA 364-108
<b>MECHANICAL</b>		
Cable Flex	No discontinuities of 1 microsecond or longer duration. See note	SFF-8417, 250 cycles 1 lb weight to be used
<b>ENVIRONMENTAL</b>		
Thermal Shock	See note	EIA 364-32, Test Method A, Test condition VIII subject cable assemblies to 10 cycles between -40°C and 75°C
Temperature Life	See note	EIA 364-17, Method A; Subject cables to 75°C for 500 hours



**NOTE**

*Shall meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification and Requalification Test Sequence shown in Figure 2.*

Figure 1

3.4. Product Qualification and Requalification Test Sequence

TEST OR EXAMINATION	TEST GROUP (a)	
	1	2
	TEST SEQUENCE (b)	
Initial examination of product	1	1
High Speed Test	2,4	2,5
Cable Flex	3	
Thermal Shock		3
Temperature Life		4
Final examination of product	5	6



**NOTE**

(a) Specimens shall be prepared in accordance with applicable instruction sheets and shall be selected at random from current production. A sample size of 5 cables will be used for each test group.

(b) Numbers indicate sequence in which tests are performed

Figure 2