1.0 SCOPE

1.1. Content

This specification covers performance, tests and quality requirements for 3.96mm pitch WtB Connector. Applicable product descriptions and part numbers are as shown on product drawing.

1.2. Qualification:

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

2.0 APPLICABLE DOCUMENTS:

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

2.1 TE Connectivity Documents:

114-137287: Application Specification

501-137287: Qualification Test Report

3.0 REQUIREMENTS:

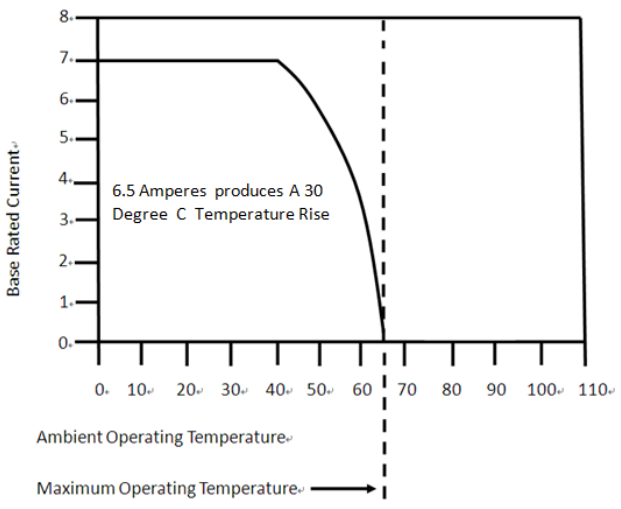
3.1 Material:

A. Housing: Thermoplastic, UL94V-0, color: natural.

B. Contact : Copper Alloy, Tin plated over nickel under plated all over.

3.2 Ratings:

A. Current Rating:



B. Voltage Rating: 250V AC,

C. Operating temperature: -25℃ to +85℃

3.3 Performance Requirements and Test Descriptions

The product is designed to meet the electrical, mechanical and environmental performance requirements as specified. Unless otherwise specified, all tests are performed at ambient environmental conditions.

3.4 TEST REQUIREMENTS AND PROCEDURES SUMMARY

3.4.1 PERFORMANCE

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Initial examination of product.	Meets requirements of product drawing and Application	EIA-364-18.Visual and dimensional (C of C)inspection per product drawing

3.4.2 Electrical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance (Low Level)	EIA-364-23.Subject specimens to 100milliamperes maximum and 20millivolts maximum open circuit voltage. See Figure 3.	10 milliohms maximum initial. 20 milliohms maximum final.
2	Insulation Resistance	EIA-364-21.500 volts DC, 2 minute hold. Test between adjacent contacts.	1000 meg ohms minimum initial. 500 meg ohms minimum final.
3	Dielectric Withstanding Voltage	EIA-364-20, Condition I500 volts AC at sea level. Test between adjacent contacts.	One minute hold with no breakdown or flashover. 1.3milliamperes maximum leakage current.
4	Temperature Rise (via Current Cycling)	EIA-364-70, Method 1.Stabilize at a single current level until 3 readings at 5 minute intervals are within 1℃.See Figure 4. 96-hour steady state.	30℃ maximum temperature rise at specified current.

3.4.3 Mechanical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Mating force.	EIA-364-13.Measure force necessary to mate specimens with companion headers a distance of 5.08 mm from point of initial contact at a maximum rate of12.7 mm per minute.	6N maximum per contact.
2	Un mating force	EIA-364-13.Measure force necessary to un mate specimens from companion headers at a maximum rate of 12.7mm per minute	0.8N minimum per contact
3	Durability	EIA-364-9.Manually mate and un mate specimens with companion headers for 15 cycles at a maximum rate of 500 cycles per hour.	See Note.
4	Crimp tensile	EIA-364-8.Determine crimp tensile at a rate of 25.4 mm per minute.	1.5kg minimum
5	Contact retention	EIA-364-29.Apply axial load at a rate of 4.4 N per second and hold for 6 seconds.	1.5kg minimum

3.4.4 Environmental requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Thermal Shock	EIA-364-32, Test Condition VII. Subject mated specimens to 10cycles between -55 and 105℃ with30 minute dwells at temperature extremes and 1 minute transition between temperatures	See Note.
2	Humidity/temperate cycling.	EIA-364-31, Method III. Subject specimens to 10 cycles (10days) between 25 and 65℃ at 80 to100% RH.	See Note.
3	Temperature life.	EIA-364-17, Method A, Test Condition 4, Test Time Condition C. Subject mated specimens to 105℃for 500 hours	See Note.
4	Solderability	Solder Wetting 95% of immersed area must show no voids, Pin holes.	Dip solder tails into the moisten solder(hold at 245±5℃) up to 0.5mm from the tip of tails for 5±0.5 sec.

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

3.5 PRODUCT QUALIFICATION AND REQUALIFICATION TEST SEQUENCE

Test or Examination	Test Group (a)						
	A	B	C	D	E	F	G
	Test Sequence (b)						
Initial examination of product	1,7	1,11	1,3	1,3	1	1,3	1,5
LLCR	2,6	2,6,8					2,4
Insulation resistance		3.9					
Withstanding voltage		4,10					
Temperature rise vs current			2				
Solder ability dip test				2			
Durability	5						
Mating force	3						
Un mating force	4						
Crimp tensile					2		
Contact retention						2	
Thermal shock		5					
Humidity/temperature cycling		7					
Temperature life							3
Sample size	5	5	5	5	5	5	5

4.0 Quality Assurance Provisions

4.1 Qualification Testing

A. Specimen Selection

Specimens shall be prepared in accordance with applicable Instruction Sheets and shall be selected at random from current production.

B. Test Sequence

Qualification inspection shall be verified by testing specimens as specified.

4.2 Requalification Testing

If changes significantly affecting form, fit or function are made to the product or manufacturing process, product assurance shall coordinate requalification testing, consisting of all or part of the original testing sequence as determined by development/product, quality and reliability engineering.

4.3 Acceptance

Acceptance is based on verification that the product meets the requirements. Failures attributed to equipment, test setup or operator deficiencies shall not disqualify the product. If product failure occurs, corrective action shall be taken and specimens resubmitted for qualification. Testing to confirm corrective action is required before resubmitted.

4.4 Quality Conformance Inspection

The applicable quality inspection plan shall specify the sampling acceptable quality level to be used. Dimensional and functional requirements shall be in accordance with the applicable product drawing and this specification.

单击下面可查看定价，库存，交付和生命周期等信息

>>TE Connectivity(泰科)