

PRODUCT SPECIFICATION D-SUB DR Series	SPEC.No.:D-SUB-002	
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Leyconn

Rev	Date	Description	Edited by	Approvals
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1. Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of **D-SUB DR Series**.

2. Shape,Construction and Dimensions:

See attached drawing

3. Materials

See attached drawing

4. Accommodated cable and P.C.Board

4.1 Thickness:1.6mm(.063)

4.2 P.C.Board Layout:See attached drawings

5. Rating:

A	Voltage	250V (RMS)
B	Current	1 A
C	Temperature	-40°C ~+ 105°C

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6. Product Performance and Requirements:

Electrical Performance		
Test Description	Test Procedures & Condition	Requirements
Temperature Rise vs Current Rating	EIA 364-70 Measure temperature rise vs current at 0.5A minimum when measured at an ambient temperature of 23±3°C.	The ΔT shall not exceed +30°C at any point in the connector under test.
Contact Resistance	EIA 364-23 Subject mated contacts assembled in housing to closed circuit current of 100 mA maximum at open circuit at 20 mV maximum.	20 mΩ maximum
Insulation Resistance	When applied DC500 V between adjacent terminal or ground	More than 5000mΩ
Dielectric Withstanding Voltage	EIA 364-20 Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. Test Potential : 500 Vac at sea level, 60Hz Test Duration : 60 seconds	1. No flashover, No spark over, No excess leakage, No breakdown. 2. Current leakage: < 0.5mA

Mechanical Performance		
Test Description	Test Procedures & Condition	Requirements
Flammability	UL 94V-0 This procedure is to ensure thermoplastic resin compliance to UL flammability standards.	The manufacturer will require its thermoplastic resin vendor to supply a detailed C of C with each resin shipment. The C of C shall clearly show the resin's UL listing number, lot number, date code, et cetera.

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Contasct retaining Force In insulator	Retention speed form ousing 25 ± 3 mm from housing	More than 2.5 Kgf
Single contact insertion force	Measure force to with drawal using $\varnothing 1.04$ mm Test pin at speed 25 ± 3 mm per minute	 240 gram max
Single contact withdrawal force	Measure force to with drawal using $\varnothing 0.99$ mm Test pin at speed 25 ± 3 mm per minute	15 gram min
Test Description	Test Procedures & Condition	Requirements
Vibration (Random)	1.5 mm 10-55-10HZ / munute each 2 hours for X, Y and Z directions	Appearance:No damage Discontinuity I micro second max
Durability	Measure contact and shell resistance after following Automatic:1000 cycles at 100 ± 50 cycles per hour	Contact Resirance Contact: Less than twice of initial

Environmental Performance		
Test Description	Test Procedures & Condition	Requirements
Solder ability	EIA 364-52 Subject unmated connectors should be tested according to the condition listed below: Steam Aging Temperature: $90 \sim 96^{\circ}\text{C}$ Steam Aging Duration: 8 hours ± 5 min. Soldering Temperature: $230 \pm 5^{\circ}\text{C}$ Soldering Time: 4 ~ 5 seconds Flux: Inactivated	Continuous solder coating with a minimum 90% coverage.
Resistance to Soldering Heat	Soldering time: 5 ± 0.5 seconds Soldering pot: $260 \pm 5^{\circ}\text{C}$	No damage.
Test Description	Test Procedures & Condition	Requirements

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Humidity	40 ± 2 °C, 90-95%RH ,96 hours measurement must be taken within 30 min. After tested	Appearance:No Damage Contact resistance:Less than twice of initial Dielectric strength to pass para 8-4
Heat aging	105 ± 2°C , 90-95% RH ,96hours measurement must be taken within 30 min after tested	:No damage
Temperature cycling	One cycle consists of : 1. $-55 \frac{+0}{-3}$ °C, 30min 2.Room temp .10-15 min 3. $85 \frac{+3}{-0}$ °C, 30min 4.Room temp .10-15 min	Appearance:No damage Contact resistance:Less than twice of initial
Salt Spray	EIA 364-26 Subject mated and unmated connectors should be tested according to the condition listed below: Temperature: 35±3°C Solution : 5 ± 1% Spray time::48 ± 4 hours Measurement must be taken after water rinse	Appearance: . No evidence of damage. 2. Contact resistance: Less than twice of initial

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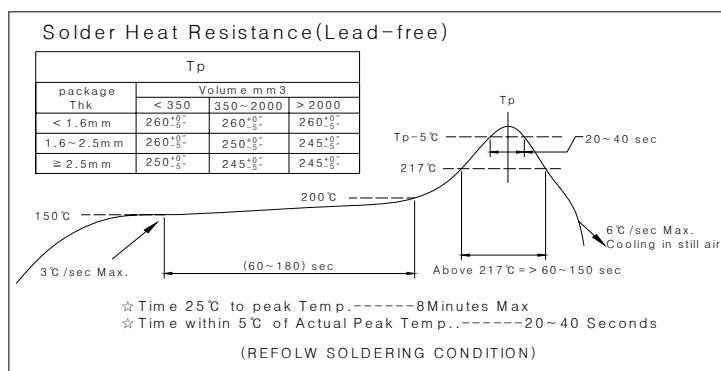
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Soldering Condition:

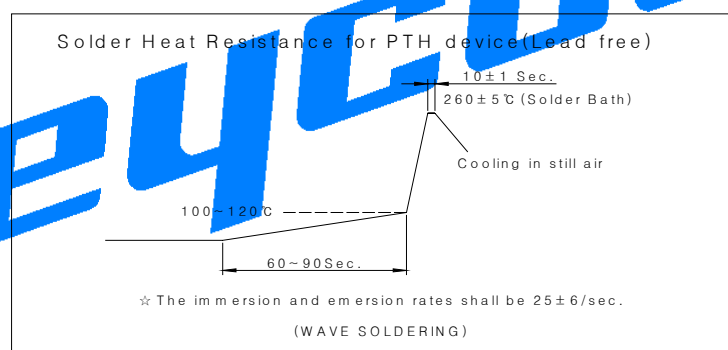
Reflow soldering

Lead-Free-IPC / IPC-STD-020C



Wave Soldering

Lead-Free-JESD22-B106C-Lead-free



7. Mating force and unmating force (Unit:Kgf)

No. Of Circuits	Mating Force (Initial max.)	Unmating Force(Initial max.)
15	5.1	3.8
26	9.2	6.9
44	12.6	8.6
62	16.4	10.8