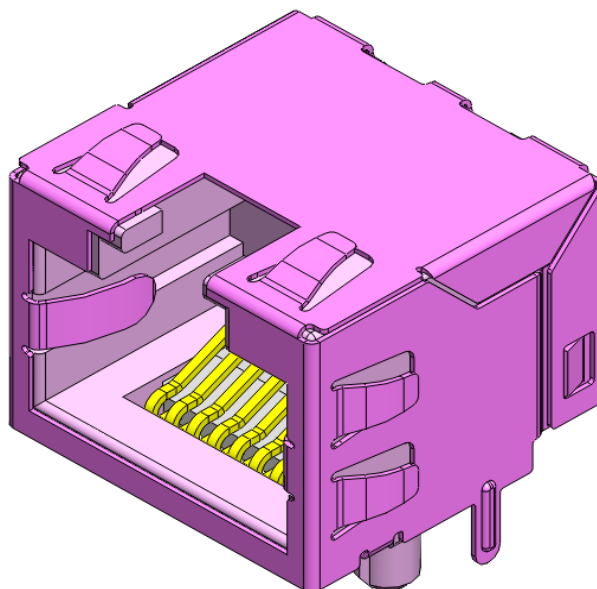




PRODUCT SPECIFICATION



Acron P/N: GDR15-N3-081A300 (TRAY PACKING)
GDR15-N3-081A100 (TAPE REEL)

育鼎精密工業股份有限公司
ACRON PRECISION INDUSTRIAL CO., LTD

桃園縣八德市廣德里新興路 55 號

No.55, SinSing Road., Bade City, Taoyuan County 334, Taiwan(R.O.C)

TEL : 886-3-3629889 FAX : 886-3-3664917

□東莞睦永電子五金廠
(AMMI)

□東莞育鼎電子五金廠
(ACRON)

■東莞愷興電子科技電子有限公司
(NUCONN)

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DOCUMENT NUMBER: PS-GD-0007		CREATED / REVISED BY: ANDELEE.YANG		CHECKED BY: JERRY.TUNG	APPROVED BY: KIMI.HSU



PRODUCT SPECIFICATION

PRODUCT CHANGING HISTORY

NO	DATE	Changing	REV	Made	Approved
1	10/12'10	NEW	A	Liang.Wu	Devin Chen
2	01/25'11	ADD REFLOW TEST SPECIFICATION	B	Liang.Wu	Devin Chen
3	06/11'14	ADD PRODUCT SPECIFICATION	C	Ryan.Wu	Kimi.Hsu
4	06/11'14	RDT-140140	D	Ryan.Wu	Kimi.Hsu
5	06/20'14	RDT-140166	E	Andelee	Kimi.Hsu
6	07/07'14	RDT-140179	F	Andelee	Kimi.Hsu
7	11/24'16	RD-T160051	G	Andelee	Kimi.Hsu

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PS-GD-0007		ANDELEE.YANG		JERRY.TUNG	KIMI.HSU



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers the performance requirements for Without transformer/LED RJ45 R/A Dip type series

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

Acron part No: GDR15-N3-081A300 (Tray packing)

GDR15-N3-081A100 (Tape reel packing)

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See appropriate sales drawings for details on dimensions ,materials , plating and markings.

2.3 SAFETY AGENCY APPROVALS

See appropriate sales drawings

2.4 PRODUCT WEIGHT

The product weight is 2.711g

2.5 PRODUCING PLANT FACTORY AND ADDRESS

Producing plant factory: Nuconn Industry CORP

Nuconn Industry CORP. Address:

32# No. 2 Road 3th IND. Shang Sha, ChangAn , Dong Guan, Guang Dong, China

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Please refer to the Sales Drawings , and other sections of this Specification for specific references to applicable documents and specifications. In cases where the Product Specification differs from the Sales Drawings, the Sales Drawing will take precedence

EIA-364 TEST METHODS FOR ELECTRICAL CONNECTORS

4.0 RATINGS

TEMPERATURE

Operating Temperature Range: -25°C to + 80°C

Storage Temperature Range: - 25°C to + 60°C

Voltage Rating: AC 125V

Current Rating: 1A

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PRODUCT SPECIFICATION

5.0 PERFORMANCE

Item	Test Items	Requirement	Procedures
1	Examination of Product	Meets requirements of product drawing. No physical damage.	Visual, dimensional and functional per applicable quality inspection plan.

Electrical Requirements

2	LOW Level Contact Resistance	50mΩ max initial ΔR = 50mΩ max final	Mate subject connector with compatible connector. EIA-364-23B
3	Insulation Resistance	1000 MΩ min initial 50 MΩ min final	Apply 100±10% Volts DC between adjacent contacts of mated connectors for one minute. EIA-364-21
4	Dielectric Withstanding Voltage	No discharge, flashover or breakdown. Current leakage: 1m A max	For mated specimens, AC 1500 V between connected RJ interface contacts and all PCB tails connected together with shield. 1 milliamp ere cutoff current, 1 A Volts per second maximum ramp. EIA-364-20D

Mechanical Requirements

5	Mating and Un-mating Forces	Insertion Force:22N max Unlatched Withdrawal Force: 22N max Latched Withdrawal Force: 89N min	Measure force necessary to mate and un-mate connectors using the free floating fixtures at rate of 25mm/min. EIA-364-05B
6	Solder ability	Wetting must occur over at least 95% of the solder immersion surface	(1) SN/3.0Ag/0.5Cu(weight/%), (2) Flux: ROSN 25%,PA 75%. (3) High Temp Storage:150℃ 1 hour, (4)PCT: 105℃ 100% 1.22*105Pa 4 hours. (5)Solder 240℃±2℃; Immersion depth 2mm; Immersion time 3S
7	Terminal Strength	Appearance meet requirement	Gravitation 500g , Winding 90 angle 2-3sec
8	Physical Shock	No electrical discontinuity greater than 1μsecond. Shall meet visual requirements, and show no physical damages.	Subject mated connectors to 50 G's (peak value) half-sine shock pulses of 11 milliseconds duration. Three shocks in each direction shall be applied along the three mutually perpendicular axes of the test

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PRODUCT SPECIFICATION

			specimen (18 shocks). The electrical load condition shall be 100mA maximum for all contacts. EIA-364-27B
9	Solder Joint Strength Test	(1) The variation must be 50 % \leq of the initial value (2) After test measured items must be 75 % \leq of solder (Pb/Sn) item	(1)Prepare Sample: A: flow type: SN/3.0Ag/0.5Cu,Cream solder type: 250℃ 2~5s B: Reflow type: 150±20um(print thickness) Peak temperature:240 MAX 5S \geq 220℃ min. 40S \leq Preheat 150~190℃ 90±30S (2)Temp Cycle Test Min Temp: -40℃. MAX TEMP:+125℃ TIME : Each 30 min. CYCLES:200 (3) Measurement Item: Component with LEAD: Tension Test (EIAJED-4702); Component without LEAD: Bend Test (EIAJED-4702) (4) Measurement cycle: INITIAL,(100) 200 (5) Measurement SMPL: Component with LEAD: 5LEADS \leq Component without LEAD: 5POINTS \leq To calculate Average and s
10	Durability	750 cycles with no function damage for RJ-45. Low Level Contact Resistance: $\Delta R = 50 \text{ m}\Omega$ max final	The sample should be mounted in the tester and fully mated and unmated 300 times per hour at the rate of 25mm/min. EIA-364-09C
11	Random Vibration	No electrical discontinuity greater than 1μsecond. Shall meet visual requirements, and show no physical damages.	The electrical load condition shall be 100mA maximum for all contacts. Subject to a simple harmonic motion having amplitude of 0.76mm (1.52mm maximum total excursion) in frequency which being varied uniformly between the approximate limits of 10 and 55 Hz. The entire frequency range, from 10 to 55 Hz and return to 10 Hz, shall be traversed in approximately 1 minute. This motion shall be applied for 2 hours in each of three mutually perpendicular directions. EIA-364-28D

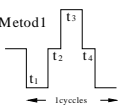
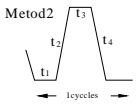
REVISION:		ECR/ECN INFORMATION:		PRODUCT NO	GDR15 Series (Sharp)	SHEET No
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12	KOJIRI Strength	Appearance meet requirement	Left: 100N, push 15sec Right: 100N, push 15sec Up: 100N, push 15sec Down : 100N, push 15se
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Environment Requirements

13	Thermal Shock (Simulate Non-Operating State)	ΔR : 50m Ω max (change from initial) & Appearance: no damage	Subject mated connectors to 100 cycles between -40°C and 85°C, 30 minutes duration at both temperature extremes. EIA-364-32C															
14	Humidity-Temperature Cycling	ΔR : 50m Ω max (change from initial) & Appearance: no damage	Mated connectors placed in humidity chamber (Humidity 80-98%, Temperature 20-65°C) for 500 Hrs. EIA-364-31B, Method IV, Except 7a															
15	Temperature Life (Heat Aging)	ΔR : 50m Ω max (change from initial) & Appearance: no damage	Subject mated connectors to temperature life at 85°C for 500 hours. EIA-364-17B, Method A															
16	Temperature Life (Cold Aging)	ΔR : 50m Ω max (change from initial) & Appearance: no damage	Subject mated connectors to temperature life at -40°C for 500 hours EIA-364-17B, Method A															
17	Salt Spray	ΔR : 50m Ω max (change from initial) & Appearance: no damage	8hours moving 16hours resting total 24hours 3cycles Atmosphere: salt spray from a 5% solution. Temperature: 35 +1/-2°C EIA 364-26															
18	Change of Temperature	JIS C 0025 JEC Pub.68 2-14 NA MIL-STD-202 102A (Unless otherwise specified, either method 1or method 2. is to be chosen)	<div><div><p>Metod1</p></div><div><p>Metod2</p></div><div><p>(Both Method 1and2 are be performed under following conditions)</p><table><thead><tr><th>Stage</th><th>Temp</th><th>Time</th></tr></thead><tbody><tr><td>t1</td><td>-55° ±3</td><td>30min</td></tr><tr><td>t2</td><td>15~35°C</td><td>Less than 5min</td></tr><tr><td>t3</td><td>85° ±3</td><td>30min</td></tr><tr><td>t4</td><td>15~35°C</td><td>Less than 5min</td></tr></tbody></table><p>Number of test cycles:100cycles</p></div></div>	Stage	Temp	Time	t1	-55° ±3	30min	t2	15~35°C	Less than 5min	t3	85° ±3	30min	t4	15~35°C	Less than 5min
Stage	Temp	Time																
t1	-55° ±3	30min																
t2	15~35°C	Less than 5min																
t3	85° ±3	30min																
t4	15~35°C	Less than 5min																
19	Damp Heat, Steady State	JIS C 0022 JEC Pub.68 2-3 Ca MIL-STD-202 103B	Test Temp :40±2°C Relative Humidity:90~95%RH Test time:500Hrs															

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PRODUCT SPECIFICATION

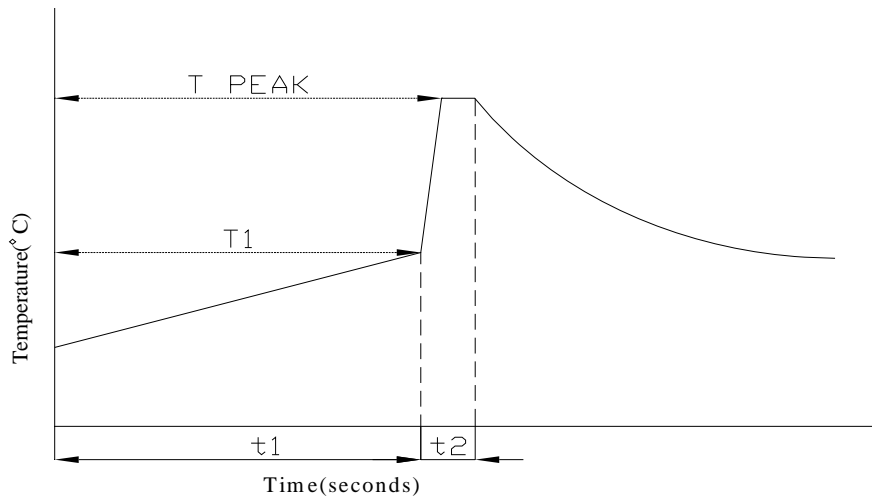
20	Ammonia	Appearance: no damage	Hydrogen Ion Exponent Index (PH)=10 Test Temperature:15~35℃ Test Time:72±4hrs																					
21	Soldering Heat	1: Electrical and mechanical performance must be satisfactory in specifications 2:There must no conspicuous changes in appearance(For example warping , swelling, cracking, indication)	MATERIALS Solder : Sn/3.0Ag/0.5Cu(weight/%) , If no doubts arise in judgment, it is ok to use another SOLDER TEST CONDITION 1.TEST A: Hand Soldering 400℃(Soldering iron tiop) 3S≡ 2.TEST B: flow soldering(whole heating): 260℃ 5S≡ (Preheating 100~120℃ 70s≡) 3.TEST C: Reflow soldering : Peak temperature:240 MAX 5S≧ 220℃ min. 40S≡ Preheat 150~190℃ 90±30S The reflow count is 2 times or more																					
22	Drop test	1. Appearance: no damage 2. Electrical function OK	<table><tr><th colspan="3">Testing Method</th></tr><tr><td>A</td><td>Type of packing</td><td>Individual packing per box</td></tr><tr><td>B</td><td>Fall floor</td><td>Drop on wooden board surface (or equivalent thing)</td></tr><tr><td>C</td><td>Fall height</td><td>1m</td></tr><tr><td>D</td><td>Fall position</td><td>X/Y/Z</td></tr><tr><td>E</td><td>The number of times fall</td><td>2 times each</td></tr><tr><td>F</td><td>Fall method</td><td>Free fall</td></tr></table>	Testing Method			A	Type of packing	Individual packing per box	B	Fall floor	Drop on wooden board surface (or equivalent thing)	C	Fall height	1m	D	Fall position	X/Y/Z	E	The number of times fall	2 times each	F	Fall method	Free fall
Testing Method																								
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C	Fall height	1m																						
D	Fall position	X/Y/Z																						
E	The number of times fall	2 times each																						
F	Fall method	Free fall																						

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage. See packaging appropriate drawings

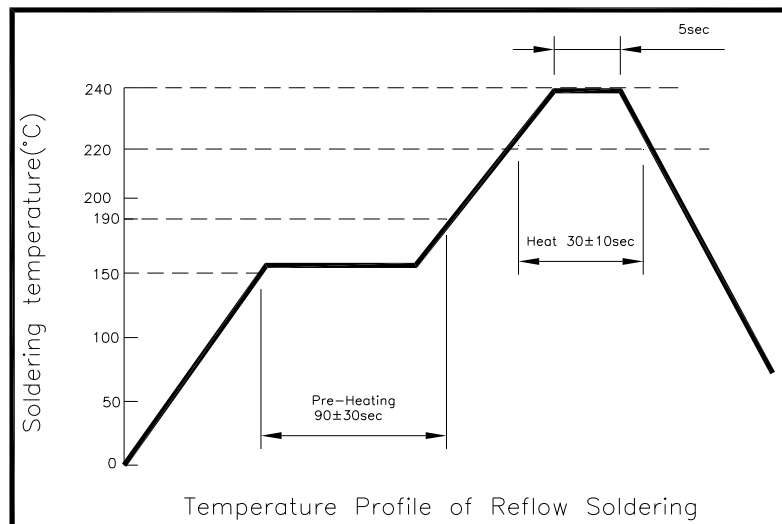
7.0 RECOMMENDED FLOW SOLDERING PROFILE

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PARAMETER	REFERENCE	LEAD FREE SPECIFICATION
PREHEAT TEMPERATURE GRADIENT		+1~4°C/sec
PREHEAT TIME	t1	70 sec
PREHEAT TEMPERATURE	T1	100~120°C
SOLDER POT TEMPERATURE	T PEAK	260°C
DWELL TIME	t2	5 SEC
PEAK BOARD TOP TEMPERATURE		190°C
COOLING TEMPERATURE GRADIENT		-6°C/SEC MAX.

8.0 RECOMMENDED REFLOW PROFILE

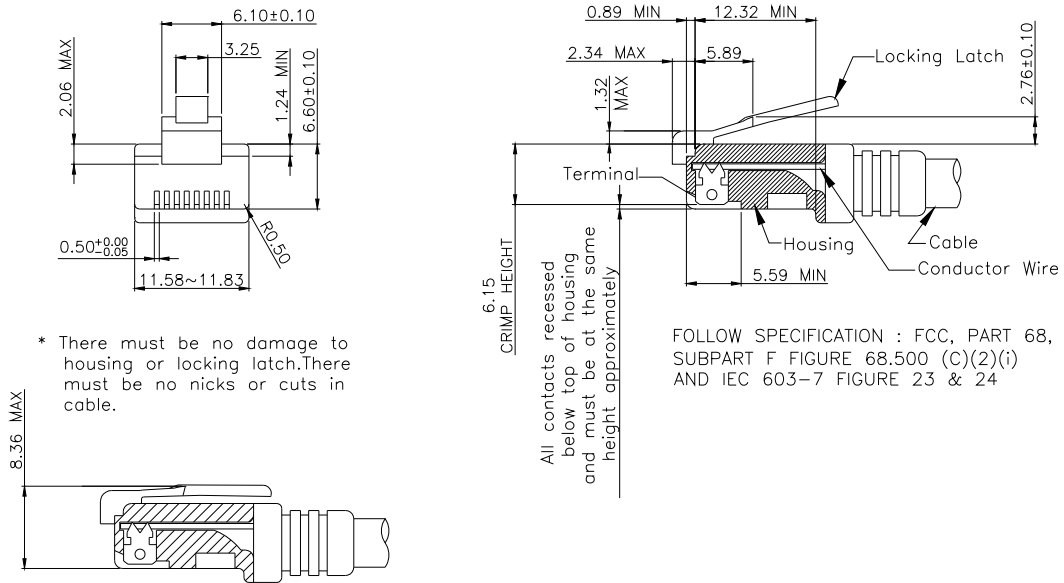


9.0 RECOMMENDED RJ PLUG SPECIFICATION

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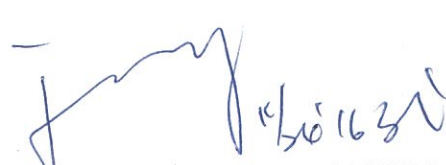


FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F
FIGURE 68.500 (C)(2)(ii)

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AdRON 文件制訂、修訂、廢止申請單

RD-PS-A-001-118

文件編號	PS-GD-000)	文件名稱	GDR15 Series (Sharp)		
申請部門	研發部	申請人	Anshlee	日期	11.24.2016
制訂單位	研發部	制訂人	Anshlee	日期	11.24.2016
<input type="checkbox"/> 制訂 <input checked="" type="checkbox"/> 修訂 <input type="checkbox"/> 廢止原因說明	ZERNO. RC-T16005) (Rev. G) 修改 Part No. GDR15 Series				
相關單位審查	<div style="text-align: right;">  11/25 </div> <div style="text-align: center;"> Frank Edmond 11/29 11/28 </div> <div style="text-align: right;">  11/24/2016 </div>				
核准	 11/20/16				