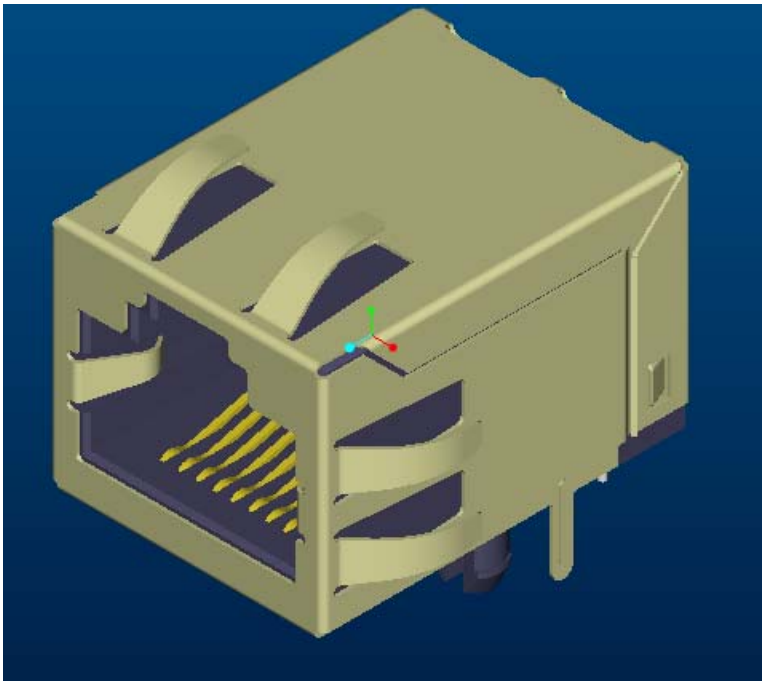
PRODUCT SPECIFICATION



GDI10-N3-080K3

育鼎精密工業股份有限公司
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REVISION:	ECR/ECN INFORMATION:		PRODUCT NO	GDI10-N3-080K3	SHEET No
A	EC No: DATE:	2010/06/21	PRODUCT NAME	1X1 TAB UP RJ45 10/100 BASE-T	1 of 8

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-GD-0005	BRIAN.TAN	KENNY.CHEN	DEVIN.CHEN

PRODUCT SPECIFICATION

CHANGING HISTORY

NO	DATE	Changing	REV	Made	Approved
1	08/03'10	NEW	A	Brian Tan	Devin Chen

1.0 SCOPE

This Product Specification covers the performance requirements for 1X1 tab up RJ45 with transformer connector series.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

1X1 tab up RJ45 with transformer :GDI10-N3-080K3

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 5.602g

2.5 PRODUCING PLANT FACTORY AND ADDRESS

Producing plant factory: Nuconn Industry CORP
Coil plant factory: DongGuan Nuconn Industry CORP.or JiangXi Nuconn Industry CORP or Vetak Electronic CORP.
DongGuan Nuconn Industry CORP. Address:
NO.2,ZhenHua Park,HeHe District,ShangSha,ChangeAn,DonGuan,GuangDong,
JiangXi Nuconn Industry CORP.Address:
NO. 2 Economic development area, Long nan County,Gan Zhou city ,Jiang xi
Vetak Electronic CORP. Address
XinZhai Village, Sansui city , GuiZhou,

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

4.1 TEMPERATURE

Operating Temperature Range: 0°C to + 70°C

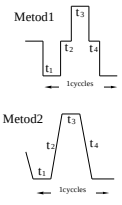
Storage Temperature Range: - 40°C to + 85°C

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**	30 mΩ max initial ΔR = 30 mΩ 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: 1 mA max	For mated specimens, 2250VDC between connected RJ interface contacts and all PCB tails connected together with shield. 1 milliamp ere cutoff current, 500 Volts per second maximum ramp. EIA-364-20
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	Solder:SN/3.0Ag/0.5Cu,Flux:ROSIN 25%,IPA75%.High Temp Storage:150℃ 1 hour, PCT: 105℃ 100% 1.22*10^{5}Pa 4 hours. Solder 240℃±2℃; Immersion depth 2mm; Immersion time 3S
7	**Terminal Strength**	Appearance meet requirement	Gravitation 500g , Winding 90 angle 2-3sec
8	**KOJIRI Strength**	Appearance meet requirement	Left: 100N, push 15sec Right: 100N, push 15sec Up: 100N, push 15sec Down : 100N, push 15se

9	**Solder Joint Strength Test**	(1) The variation must be 50 % ≦ of the initial value (2) After test measured items must be 75 % ≦ of solder (Pb/Sn) item	(1)Temp Cycle Test Min Temp: -40℃. MAX TEMP:+125℃ TIME : Each 30 min. CYCLES:200 (2) Measurement Item: Component with LEAD: Tension Test (EIAJED-4702); Component without LEAD: Bend Test (EIAJED-4702) (3) Measurement cycle: INITIAL,(100) 200 (4) Measurement SMPL: Component with LEAD: 5LEADS≦ Component without LEAD: 5POINTS≦ To calculate Average
10	**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 specimen (18 shocks). The electrical load condition shall be 100mA maximum for all contacts. EIA-364-27B
11	**Durability**	200 cycles with no function damage for RJ-45. Low Level Contact Resistance: ΔR = 30mΩ 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
12	**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

Environment Requirements

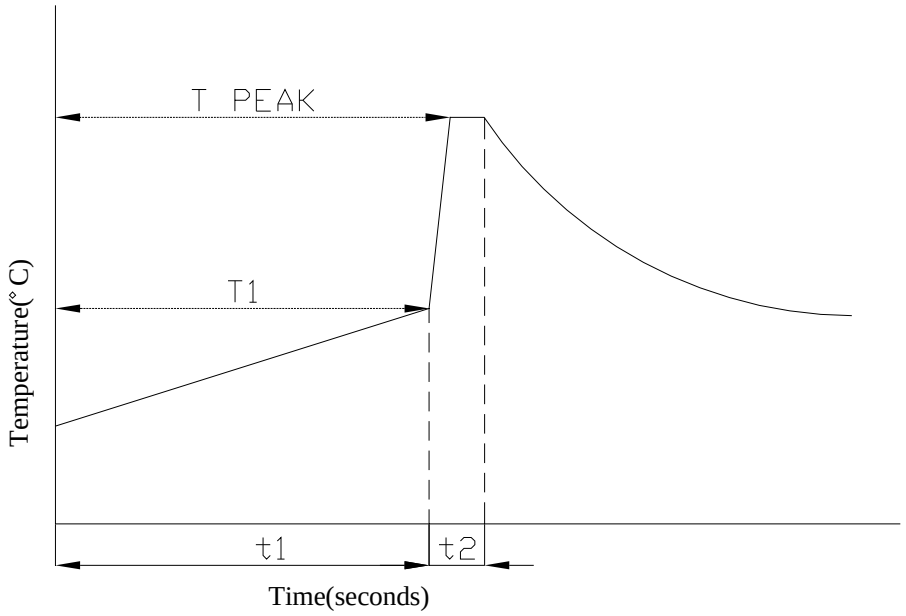
13	**Thermal Shock (Simulate Non-Operating State)**	△R: 30mΩ max (change from initial) & Appearance: no damage	Subject mated connectors to 100 cycles between -40℃and 85℃, 30 minutes duration at both temperature extremes. EIA-364-32C
14	**Humidity-Temperature Cycling**	△R: 30mΩ max (change from initial) & Appearance: no damage	Mated connectors placed in humidity chamber (Humidity 80-98%, Temperature 20-65℃) for 500 Hrs. EIA-364-31B, Method IV, Except 7a
15	**Temperature Life (Heat Aging)**	△R: 30mΩ max (change from initial) & Appearance: no damage	Subject mated connectors to temperature life at 85℃ for 500 hours. EIA-364-17B, Method A
16	**Temperature Life (Cold Aging)**	△R: 30mΩ max (change from initial) & Appearance: no damage	Subject mated connectors to temperature life at-40℃for 500 hours EIA-364-17B, Method A
17	**Salt Spray**	△R: 30mΩ 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	**Damp Heat, Steady State**	JIS C 0022 JEC Pub.68 2-3 Ca MIL-STD-202 103B	Test Temp :40±2℃ Relative Humidity:90～95%RH Test time:500Hrs
19	**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 closen)	 (Both Method 1and2 are be performed under following conditions) <table><tr><th>Stage</th><th>Temp</th><th>Time</th></tr><tr><td>t1</td><td>-40°</td><td>30min</td></tr><tr><td>t2</td><td>5~35℃</td><td>Less than 5min</td></tr><tr><td>t3</td><td>85°</td><td>30min</td></tr><tr><td>t4</td><td>5~35℃</td><td>Less than 5min</td></tr></table> Number of test cycles:100cycles
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/99Ag/0.3/Cu0.7(Weight&) If no doubts araise in judgment, it is ok to use another SOLDER TEST CONDITION 1 : TEST A: Flow Soldering (Partly Heating) 260±3℃ 10S≦ 2 : TEST B: Hand Soldering 400℃(Soldering iron tiop) 3S≦

6.0 PACKAGING

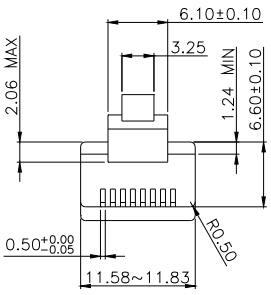
Parts shall be packaged to protect against damage during handling, transit and storage. See packaging appropriate drawings

7.0 RECOMMENDED WAVE SOLDERING PROFILE

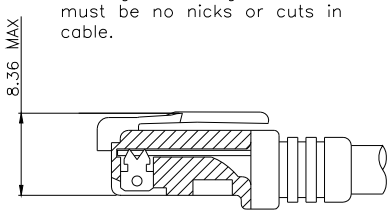


PARAMETER	REFERENCE	LEAD FREE SPECIFICATION
PREHEAT TEMPERATURE GRADIENT		+1~4℃/sec
PREHEAT TIME	t1	70 sec
PREHEAT TEMPERATURE	T1	100~120℃
SOLDER POT TEMPERATURE	T PEAK	260℃
DWELL TIME	t2	5 SEC
PEAK BOARD TOP TEMPERATURE		190℃
COOLING TEMPERATURE GRADIENT		-6℃/SEC MAX.

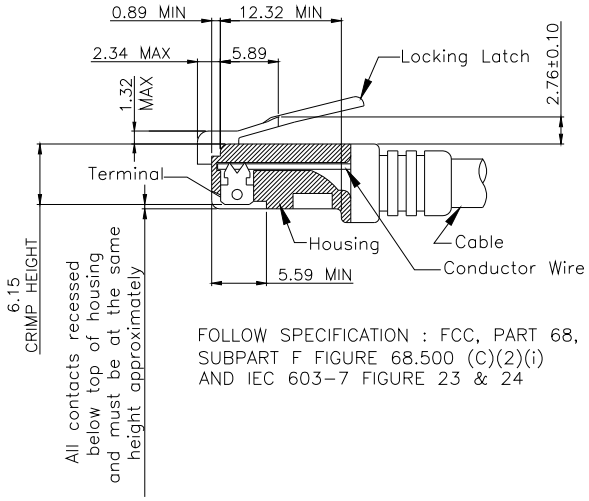
8.0 RECOMMENDED RJ PLUG SPECIFICATION



* There must be no damage to housing or locking latch.There must be no nicks or cuts in cable.



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



FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F FIGURE 68.500 (C)(2)(i) AND IEC 603-7 FIGURE 23 & 24