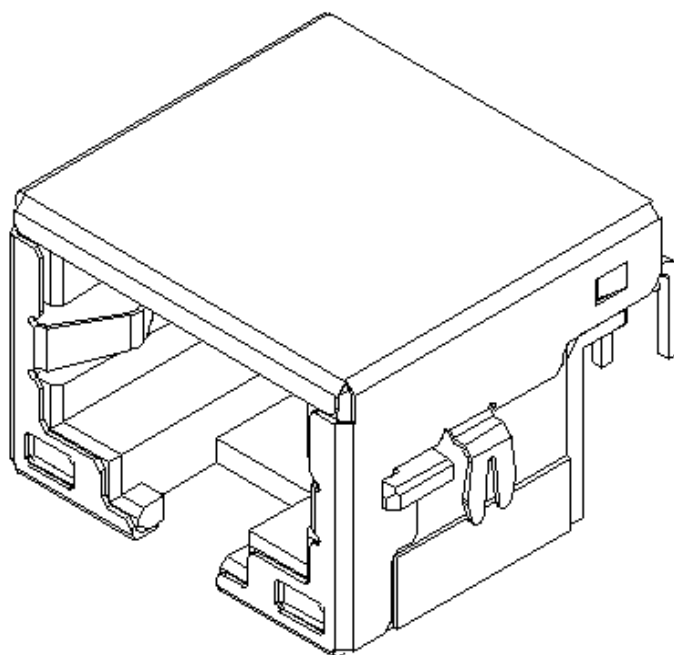# ACRON PRODUCT SPECIFICATION

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	■東莞育鼎電子五金廠	□東莞愷興電子科技電子有限公司

REVISION:	ECR/ECN INFORMATION:		PRODUCT NO	GDR11 & GDR19 series	SHEET No
A	EC No:		**PRODUCT NAME**	**RJ45,MODULAR JACK 8 POSITION, 8 CONTACTS, SHIELD,WITH LEDS**	**1** of **6**
	DATE:	**2011-08-23**			

DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-GR-0005		IVY	KENNY	DEVIN

PRODUCT SPECIFICATION

RJ45,MODULAR JACK, 8 POSITION, 8 CONTACTS,SHIELD,WITH LEDS

1.0 SCOPE

THIS PRODUCT SPECIFICATION COVERS THE 1.27mm (.050 inch) CENTERLINE (pitch) PRINTED CIRCUIT BOARD (PCB) MODULAR JACK CONNECTOR SERIES WITH SELECTIVE GOLD AND TIN PLATING.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

RJ45, MODULAR JACK 8 POSITION, 8 CONTACTS, SHIELD, WITH LEDS
P/N : GDR11-A3-08001
GDR19-A3-080*100

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

SEE THE CPPROPRIATE SALES DRAWINGS FOR INFORMATION ON DIMENSIONS, MATERIALS,PLATING AND MARKINGS.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

FCC RULES AND REGULATIONS, PART 68, SUBPART F
ANSI/EIA/TIA-568
IEC-60603-7
UL 1863
MIL-STD-202
EIA-364

4.0 RATINGS OF CONNECTOR

1. Rate Voltage: 150 V $_{RMS}$ AC
   Rate Current: 1.5 A

2. Operating temperature: -40°C to +70°C

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PRODUCT SPECIFICATION

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

	DESCRIPTION	TEST CONDITION	REQUIREMENT
	Contact Resistance	Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA.	20 milliohms (initial) 40 milliohms (final)
	Insulation Resistance	Unmated connector, mounted to a PCB: apply a voltage of 100 VDC between adjacent terminals and between terminals to ground.	500 Megohms MINIMUM
	Dielectric Withstanding Voltage	1000 VAC (1mA cutoff current) for 60 seconds duration between adjacent terminals and terminals.	No Breakdown
	Current Temperature Rating	Mate connector and measure the temperature rise at the rated current (1.5Amps).	30℃ rise maximum from initial

5.2 MECHANICAL REQUIREMENTS

	DESCRIPTION	TEST CONDITION	REQUIREMENT
	Connector Mate Force	Mate connector at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.	35 N (8 lbf) MAXIMUM
	Durability	Mate connectors up to 750 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests.	20 milliohms (initial) 40 milliohms (final)
	Vibration (Random)	Amplitude: 1.50mm (.060") peak to peak Sweep: 10-55-10 Hz in one minute Duration: 15 minutes Direction: X, Y,Z axis (45 minutes total)	20 milliohms (initial) 40 milliohms (final)
	Plug Retention Force	Apply an axial pullout force on the plug at a rate of 25 ± 6 mm (1 ± ¼ inch).	89 N (20 lbf) MINIMUM
	Shock (Mechanical)	Mate connectors and shock at 50 G Half-sine,11ms form shocks in the X, Y, Z axis (9 shocks total).	20 milliohms (initial) 40 milliohms (final)
	Solderability	Dip solder tails into the molten solder (held at 245 ± 5℃) up to 1.0mm from the bottom of the housing fo 5 ± 1 second	Solderable area shall have minimum of 95% solder coverage

5.3 ENVIRONMENTAL REQUIREMENTS

	DESCRIPTION	TEST CONDITION	REQUIREMENT
	Shock (Thermal)	Mate connectors; expose to 10 cycles of: -40°C to +85°C 30 minutes dwell	20 milliohms (initial) 40 milliohms (final) & Visual: No Damage
	Thermal Aging	Mate connectors; expose to: 240 hours at 85±2°C	20 milliohms (initial) 40 milliohms (final) & Visual: No Damage
	Humidity (Cycling)	Mate connectors: expose to 10 cycles at 90-95% relative humidity with temperatures at +25°C and +65°C per MIL-STD-202F method 106F (without -10°C dip)	20 milliohms (initial) 40 milliohms (final) & Dielectric Withstanding Voltage: No Breakdown at 500 VAC & Insulation Resistance: 200 Megohms MINIMUM & Visual: No Damage
	Solder Resistance	Dip connector terminal tails in solder: Solder Duration: 5±0.5 seconds Solder Temperature: 260±5°C {Recommended same parameters as SMES-152.}	Visual: No Damage to insulator material
	Salt Spray	5±1% salt solution Duration 48 hrs	20 milliohms (initial) 40 milliohms (final) & Visual: No Damage

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5.4 Test Group

Test Item	Test Group A	B	C	D	Individual
Examination of Product	1,5	1,8	1,5	1,6	
Contact Resistance	4		2,4	2,5	
Insulation Resistance		2,6			
Dielectric Withstanding Voltage		3,7			
Current Temperature Rating					
Connector Mate Force	2				
Durability	3				
Vibration (Random)				3	
Shock (Mechanical)				4	
Solderability					
Shock (Thermal)		4			
Thermal Aging			3		
Humidity (Cycling)		5			
Solder Resistance					★
Salt Spray					★
Plug Retention Force					★
Sample Size	5	5	5	5	5

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PRODUCT SPECIFICATION

6.0 PACKAGING

PARTS SHALL BE PACKAGED TO PROTECT AGAINST DAMAGE DURING HANDING, TRANSIT AND STORAGE.
SEE APPRPPRATE SALES DRAWINGS.

7.0 OTHER INFORMATION

7.1 LED ELECTRICAL PERFORMANCE

PARAMETER	GREEN		YELLOW		ORANGE		UNITS	TEST CONDITION
Power Dissipation	60		60		60		nm.	N/A
Reverse Voltage	5.0		5.0		5.0		V	N/A
Peak Wavelength	560~580		580~600		595~615		nm.	IF=20mA
Forward Voltage	2.2	MAX=2.5	2.2	MAX=2.5	2.2	MAX=2.5	V	IF=20mA