

承認書

APPROVAL SHEETS

客戶名稱 : 鴻海精密工業股份有限公司
MESSRS

品名 : MODULAR JACK
DESCRIPTION

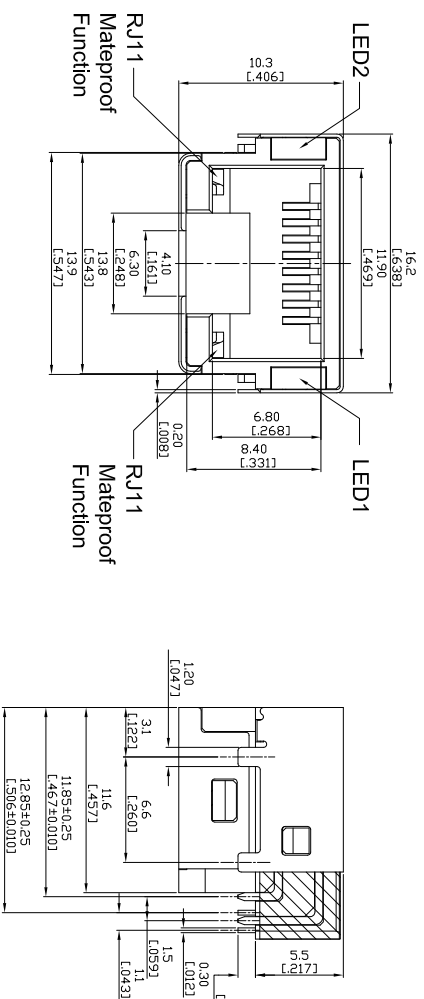
料號 : 8188K1-B511-TR
PART NO

客戶料號 :
CUSTOMER
PART NO

承認印 APPROVED BY



博 歲 電 子 股 份 有 限 公 司
POWERWAY ELECTRONICS CO., LTD.
佳 俊 有 限 公 司
BEST SMART LIMITED
2 4 1 6 1 新北市三重區中華路 18 號 3 樓
3F., No. 18, Zhonghua Road, Sanchong
District, New Taipei City 24161, Taiwan
TEL : 886-2-2986-6161 FAX : 886-2-2971-8665



Electrical Characteristics :

Insulation Resistance : 100M Ω Min.

Contact Resistance : 50mΩ Max.

Withstand Voltage : 100 VAC 1 minute.

Current Rating : 1.5A

Material:

Housing : LCP UL94V-0

Contact : Selective Gold Plating

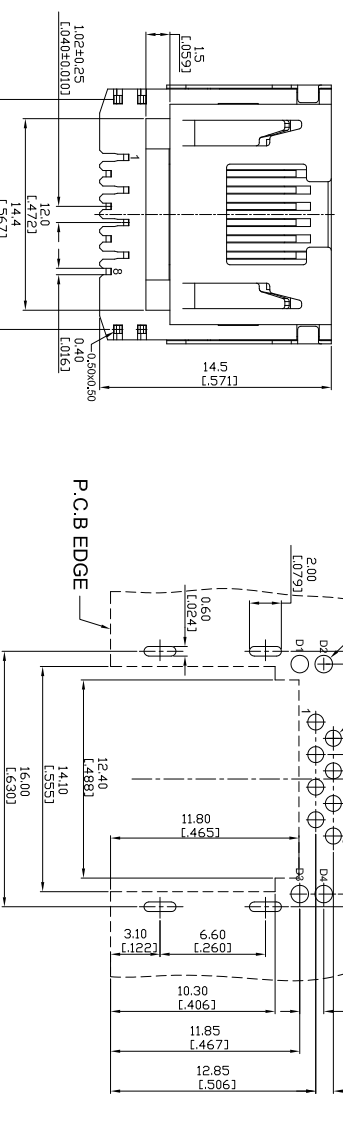
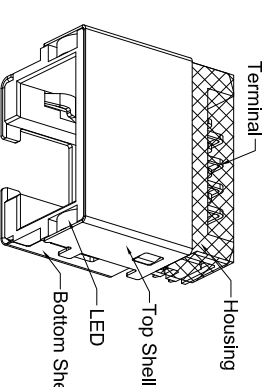
Terminal: 0.30mm Thickness Phosphor Bronze

Plated With Gold And Tin(80u" min.) In Solder Area.

Top Shield : Brass, Nickel(30u" min.) Plating.

Bottom Shield: SUS

PART NO: 8188K1-B511-TR



RECOMMENDED PCB LAYOUT

TOP VIEW

TOLERANCE:±0.05mm

PCB THICKNESS: 1.60±0.05mm

LED ELECTRICAL CHARACTERISTIC	
LED2 	LED1 

		 博 威 電 子 股 份 有 限 公 司 POWERWAY ELECTRONICS CO.,LTD.		FILE NO.		81 (SERIES)		TITLE		RJ45, Shielded, Receptacle, Horizontal, Single Port, Tht, With LED	
				PART NO.		8188K1-B511-TR		圖 名			
				料 號		REV.		版 本			
						A.0					
		TOLERANCE(公差): 0.000 mm ± 0.075 mm 0.00 mm ± 0.15 mm 0.0 mm ± 0.25 mm				UNIT 單 位		mm inch		CHECKED BY	
						SCALE 比 例		1:1		SHEET 頁 次	
								1/1		APPROVED BY	
										Etic 2018-06-04	
										Aaron 2018-06-04	



MODULAR JACK SPECIFICATION FOR REFLOW SOLDERING PROCESS

1. Materials and Finish:

1.1 Housing

- ◆ Thermoplastic, UL94V-0
- ◆ Color: Black or Optional Color Available on Demand

1.2 Contact

- ◆ Copper Alloy: Round Contacts or Stamped Contacts
- ◆ Contact Area: Selective Gold Plating
- ◆ Solder Area: Tin Plating (for Stamped Contacts)
- ◆ Under-Plating: Nickel over all

1.3 Shell(option)

- ◆ Alloy (See Material Specifications for Reference)
- ◆ Nickel plating

※ Expiration For Plating: 6 months storage period under non-unpacked parts (40%~60%RH)

2. Rating:

- ◆ Current: 1.5A
- ◆ Voltage: 150VAC
- ◆ Storage & Operating Temperature: -40°C~85°C

3. Electrical Performance:

Item		Test conditions	Performance
3.1	Contact Resistance	EIA-364-23B. Subject specimens to 100 mA maximum and 20 mV maximum dry circuit voltage	50mΩ Max (initial)
3.2	Insulation Resistance	EIA-364-21C. Subject specimens to DC 100V and measure insulation resistance between adjacent contacts, also measure between the contacts and the shield.	500MΩ Min.
3.3	Dielectric Withstanding Voltage	EIA-364-20B. Subject specimens to 1000VAC (50—60Hz) for 1 minute between adjacent terminals or ground.	No discharge or breakdown

**4. Mechanical Performance:**

Item		Test conditions	Performance
4.1	Durability	EIA-364-09C. 1,000 cycles operating at a rate of 500 ± 50 cycles per hour, without load.	(1) Contact Resistance: Initial value $+30m\Omega$ (2) There shall be no functional defects.
4.2	Mating & Unmating Force	EIA-364-13B. Mating at the rate of 12.5mm per minute with latch depressed.	30N (Max.)
4.3	Vibration Test	EIA-364-28D. Subject mated connectors to 10-55-10 Hz traversed in 1 minutes at 1.52mm amplitude 2 Hours each of 3 mutually perpendicular planes. 100mA Max. Applied.	There shall be no less in continuity longer than 1 μ s. Without harmful damage in the functions.
4.4	Mechanical Shock Test	EIA-364-27B. No. of Drops : 3 drops each to normal and reversed directions of X, Y and Z axes, totally 18 drops, passing DC 1mA current during the test. Waveform : Half-sine shock plus. Accelerate Velocity : 50G. Pulse duration: 11ms.	There shall be no less in continuity longer than 1 μ s. Without harmful damage in the functions.

5. Environmental Performance:

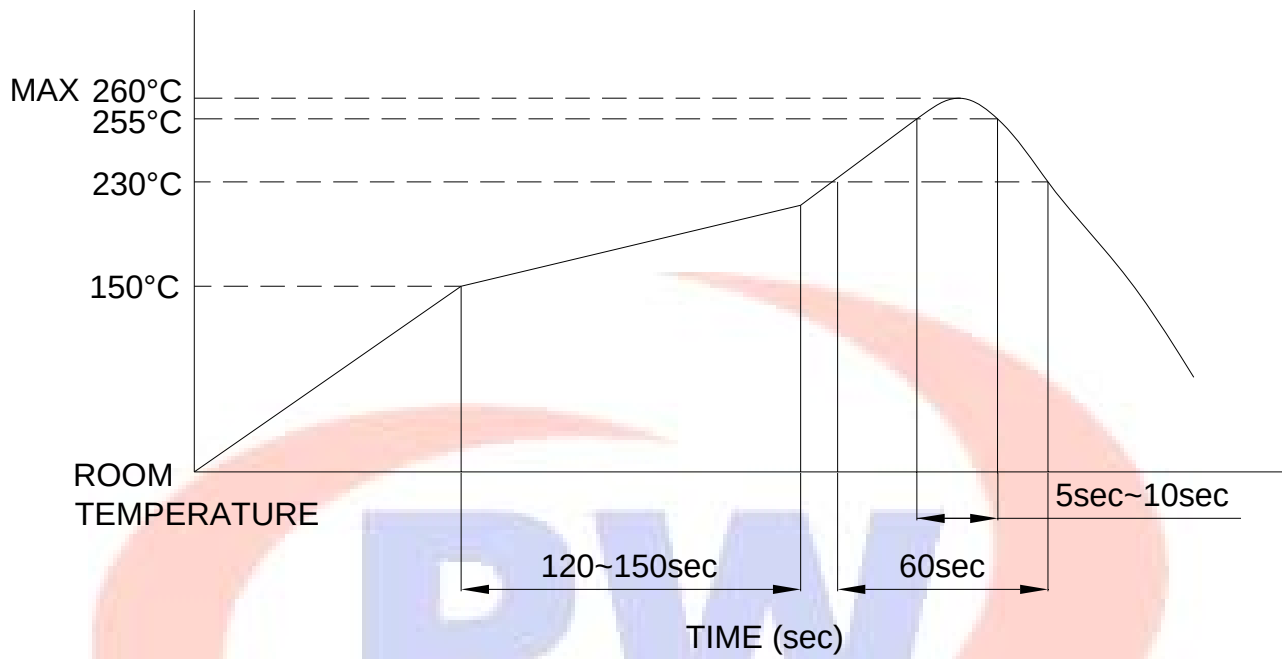
Item		Test conditions	Performance
5.1	Heat Test	EIA-364-17B. $70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 96 hours. After test kept under 25°C & 40%-60%RH for 30 minutes.	(1) Contact Resistance: Initial value $+30m\Omega$ (2) There shall be no functional defects.



5.2	Humidity Test	EIA-364-31B. 40°C±2°C, 90-95% RH for 96 hours. After test kept under 25 °C & 40%-60%RH for 30 minutes.	(1) Contact Resistance: Initial vaule+30mΩ (2) There shall be no functional defects.
5.3	Salt Spray	EIA-364-26B. Salt water shall be adjusted at 5% weight ratio. 35±1°C for 24 hours. After impurity is removed by running water, it is kept under 25°C & 40%-60%RH for 2 hours, then measure result.	(1) Contact Resistance: Initial vaule+30mΩ (2) There shall be no defects in both the appearance & the mechanical functions only on the contact area.
5.4	Soldering Heat Resistance Test	EIA-364-56C. Equipment conditions refer to the following recommended reflow soldering profile.	(1) Contact Resistance: Initial vaule+30mΩ (2) Mechanical and electrical characteristics shall be satisfied.
5.5	Solderability Test	EIA-364-52B. The top of the terminals shall be dipped 2mm in the solder bath of 245°C±5°C for 5±1.0 seconds.	A new uniform coating of solder shall cover a minimum of 95% of the surface being immersed.



REFLOW SOLDERING PROFILE



RECOMMENDED REFLOW SOLDERING CURVE

*6. Test Group and Sequence:*

ITEM	DESCRIPTION	TEST GROUP						
		A	B	C	D	E	F	G
		TEST SEQUENCE						
1	Visual inspection	1	1	1	1	1	1	1,3
2	Contact Resistance	2,7	2,5	2,4	2,4	2,4	2,4	
3	Insulation Resistance	3,8						
4	Withstanding Voltage	4,9						
5	Mating & Unmating Force	5,10						
6	Durability	6						
7	Vibration Test		3					
8	Mechanical Shock Test		4					
9	Heat Test			3				
10	Humidity Test				3			
11	Salt Spray					3		
12	Soldering Heat Resistance Test						3	
13	Solderability Test							2
Sample Size(pcs)		5	5	5	5	5	5	5

Note: