SPECIFICATION

宏致電子股份有限公司

桃園縣中壢市東園路13號

No.13, Dongyuan Rd., Jhongli City,

Taoyuan County 320, Taiwan (R.O.C.)

TEL: +886-3-463-2808
FAX: +886-3-463-1800

SPEC. NO.: PS-88460-XXXXX **REVISION:** F

PRODUCT NAME: 0.8 mm PITCH IDC WAFER SMT S/T TYPE

PRODUCT NO: 88460、88740 series; 88459 series; 87036 series

PREPARED:	CHECKED:	APPROVED:
Even	**WGCH**	**Jason Chen**
DATE: **2008.03.26**	DATE: **2008.03.26**	DATE: **2008.03.26**

1 Revision History

Rev.	ECN #	Revision Description	Approved	Date
C	ECN-0707182	Add PART NUMBER AND MODIFY SALT SPRAY	Jason	2007.07.31
D	ECN-0711038	新增 22P 插拔力規格	Jason	2007.11.14
E	ECN-0802030	REFER TO 88459 SERIESE	Jason	2008.02.15
F	ECN-0803166	ADD 87036 SERIESE	Jason	2008.03.26

2 SCOPE

This specification covers Aces's 0.8 mm pitch IDC WAFER SMT S/T TYPE ◦ This Product Spec. Refer to…Aces- P/N ： 88460, 88461, 88740, 88741, 88459-xxxx-xx-x, 87036 Series.

3 APPLICABLE DOCUMENTS

EIA-364 ELECTRONICS INDUSTRIES ASSOCIATION

4 REQUIREMENTS

4.1 Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable product drawing.

4.2 Materials and Finish

4.2.1 Terminal: High performance copper alloy (Phosphor Bronze)
Plated: (a) Finish: See order information
(b) Under plate: Nickel-plated all over
4.2.2 Housing: Thermoplastic, High temp. UL94V-0
4.2.3 Fitting: High performance copper alloy
Plated: (a) Finish: See order information
(b) Under plate: Nickel-plated allover

4.3 Ratings

4.3.1 Voltage: 50 Volts DC
4.3.2 Current: DC 0.7 Amperes AWG# 34
4.3.3 Operating Temperature : -25℃ to +85℃

5 Performance

5.1. Test Requirements and Procedures Summary

Item	Requirement	Standard
Examination of Product	Product shall meet requirements of applicable product drawing and specification.	Visual, dimensional and functional per applicable quality inspection plan.
ELECTRICAL		
Contact Resistance	Initial: 30 mohms max. After: 40 mohms max.	Mate connectors and measure by dry circuit, 20m V max. 10m A (EIA-364-23)
Insulation Resistance	100 M Ω Min.	Unmated connectors, apply 500 V DC between adjacent terminals. (EIA-364-21)
Dielectric Withstanding Voltage	No Breakdown.	Mate connectors and apply 500 V AC/rms for 1 minute between adjacent terminal or ground (EIA-364-20)

MECHANICAL		
Item	**Requirement**	**Standard**
Insertion /Extraction Forces (Mating/ Un-mating Force)	See item 4	Measure the force necessary to mate connector assemblies at a maximum rate of 25.4mm per minute. (EIA-364-13)
Wire pull out force	AWG#34 :3N Min.	Fix the crimped terminal ,apply axial pull out force on the wire at speed rate of 25.4mm per minute.
Terminal/Housing Retention force	3N Min.	Apply axial pull out force at the speed rate of 25.4mm per minute on the terminal assembly in the housing

ENVIRONMENTAL		
Temperature Rise	Temperature rise：30℃ max	Carrying rated current load
Vibration	1 μs Max.	Amplitude ：1.5 mm P-P Sweep time：10-55-10 Hz in 1 minute Duration：2 hrs in each X.Y.Z. axis (EIA-364-28)

Shock	1 μs Max.	Mate connectors and subject to the following shock conditions. 3 shocks shall be applied along 3 mutually perpendicular axes,passing DC 1mA current during the test. (Total of 18 shocks) Test Pulse：Half SinePeak Value：490m/s2 〔50G〕 (EIA-364-27)
Heat Resistance	Appearance：no damage Contact Resistance： 40 mohms max	85 +/−2℃, 96 hrs.
Cold Resistance	Appearance：no damage Contact Resistance： 40 mohms max	-40+/−2℃, 96 hrs
Humidity	Appearance：no damage Contact Resistance：40 mohms max Insulation Resistance：100 mohms min.	Temperature：60+/−2℃ Relative humidity ：90 ~ 95 % Duration：96 hrs. (EIA-364-31)
Temperature Cycling	Appearance：no damage Contact Resistance：40 mohms max	5 cycles of： (a) -40+/−3℃, 30 minutes (b) +85 +/−2℃, 30 minutes
Salt Spray	Appearance：no damage	48 hrs exposure to salt spray from 5±1% solution at 35 ±2℃
Solder-Ability	75% of immersed area must show no voids, pin holes	Soldering time：3+/−0.5 Sec Solder temperature：230+/−5℃ 0.5 mm from Terminal tip and fitting nail tip
Resistance to Soldering heat	Appearance：no damage Contact Resistance：40 mohms max	Soldering time：3+/−0.5 Sec Solder temperature：230+/−5℃ 0.5 mm from terminal tip and fitting nail tip

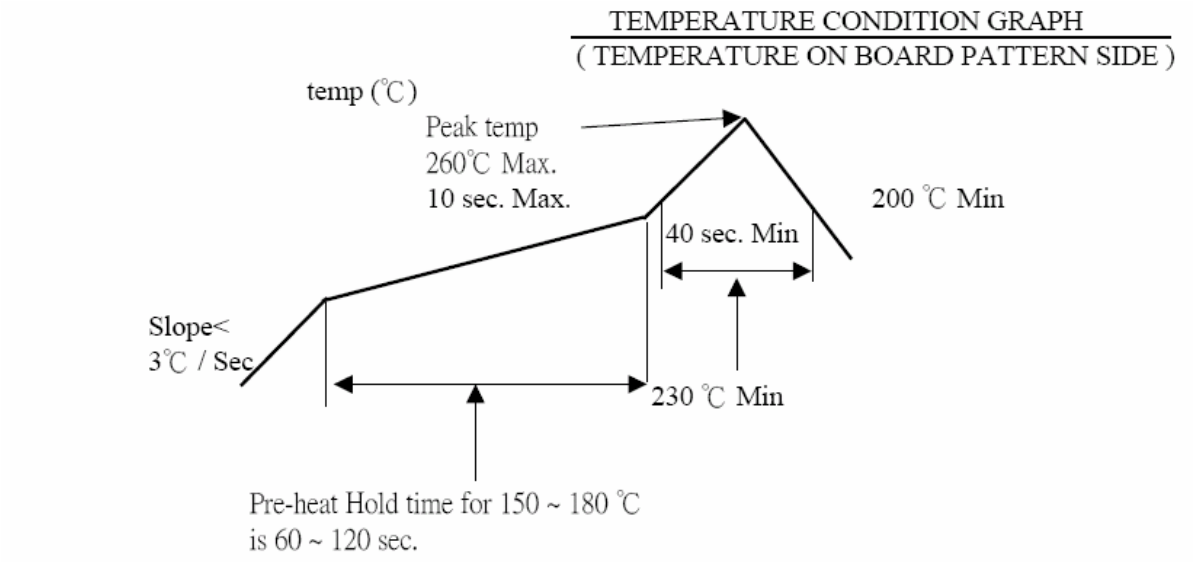
6 Insertion / Extraction Force

Unit : N

Number of circuits	At initial		At 30th
	I.F.(Max.)	W.F.(Min.)	W.F.(Min.)
2	3	1	0.8
3	4.5	1.5	1.2
4	6	2	1.6
5	7.5	2.5	2
6	9	3	2.4
7	10.5	3.5	2.8
8	12	4	3.2
9	13.5	4.5	3.6
10	15	5	4
22	25	10	8

7 INFRARED REFLOW CONDITION

Lead-free Process



8 PRODUCT QUALIFICATION AND TEST SEQUENCE

Test or Examination	Test Group										
	1	2	3	4	5	6	7	8	9	10	11
	Test Sequence										
Examination of Product		1、9		1、7	1、4						
Contact Resistance		3、8	1、4	2、10	2、5			1、3			
Insulation Resistance				3、9							
Dielectric Strength				4、8							
Temperature Rise	1										
Insertion /Extraction Forces		2、7									
Wire pull out Forces		4、6									
Terminal/Housing Extraction Forces		5									
Vibration			2								
Heat Resistance			3								
Cold Resistance				5							
Humidity				6							
Temperature Cycling					3						
Solder ability							1				
Resistance to Soldering Heat								2			
Salt Spray						1					
Sample Size	2	4	4	4	4	4	4	2			