



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

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REVISION:	ECR/EC	CN INFORMATION:		PRODUCT NO		BTC35 SERIES S			SHEET No
Α	EC No: DATE:	PDR-A150 2015/12/3		PRODUCT NAME	1 PIN POGO PIN WITH HOUSING				<b>1</b> of <b>4</b>
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PS-BC-0111				TOM JER		RY	KIMI.I	HSU	



### 1.0 SCOPE

This specification defines the related performance of the 1 PIN POGO PIN connector.

### 2.0 PRODUCT DESCRIPTION

This Pogo-Pin consists of one contact pin, one spring, and a housing, For materials, plating see below Product Name: BTC35 Series

#### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See product drawing (according to the newest revised edition ) and other sections of this specification for the relevant reference documents and specifications. In cases where the specification differs from the product drawings, the product drawings take precedence.

#### 4.0 RATINGS

4.1	Rated Current (per contact)	2 Amp Max.		
4.2	Rated Voltage	12 V DC RMS .		
4.3	Operating temperature range	-40°C~ +85°C .		

### **5.0 ELECTRICAL PERFORMANCE**

Test Ref.	Item	Test Condition	Requirements		
5.1	Contact Resistance	Mate connector with circuit of 20mV, 100mA Max. Measured from pin side to shaft side, deflection 22.42mm Working Height. EIA-364-23B	[Contact Resistance]: 50 mΩ maximum		
5.2	Contact Current Rating	The connector temperature and test current shall be measured and recorded.  ANSI/EIA-364-70	[Temperature rise ]: 30°C Max.		

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### 6.0 MECHANICAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
6.1	Durability	Mate and un-mate contacts at a rate of 10~20 cycles/hr to 10,000 cycles.  Deflection: 22.42 mm Working Height.  EIA-364-09C	[Contact Resistance]: 50mΩ Maximum,
6.2	Normal Force	Test speed of 25 mm/minute.  Measure normal force at contact point, Deflection: 22.42mm Working Height from housing. EIA-364-04	[Normal force]: 150gf Min
6.3	Vibration	Subject mated connectors to 10-500 Hz traversed in 1minutes at 1.52mm amplitude for 2 Hour each of 3 mutually perpendicular planes.98.1 m/s^2 EIA 364-28D	discontinuity is never more than 1μsec. [Contact Resistance]: 50 mΩ maximum
6.4	Mechanical Shock	50G's Half-sine shock pulse for 6ms, 3 shock each X,Y,Z axes, total 18shocks EIA-364-27C	discontinuity is never more than 1μsec. [Contact Resistance]: 50 mΩ maximum
6.5	Fully compression	compress connector to 0mm from housing by hand for 10sec	[Appearance]: no damage

### 7.0 ENVIRONMENTAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
7.1	High Temperature Exposure	Simulate mated situation samples at +85°C for 48 hours 1hours recovery time EIA 364-17B	[Appearance]: no damage [Contact Resistance]: 50 mΩ maximum
7.2	Low Temperature Exposure	Simulate mated situation samples at -40°C for 48 hours 1hours recovery time EIA 364-59	[Appearance]: no damage [Contact Resistance]: 50 mΩ maximum
7.3	Humidity	Test mated connector in chamber and expose to a temperature of 40 ± 2°C with a relative humidity of 90% - 95%RH for 96 hours.  Note: Remove surface moisture and air dry for 1 hour prior to measurements.  EIA 364-31B	[Appearance]: no damage [Contact Resistance]: 50 mΩ maximum

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PS-BC-0111			TOM		JERRY KIMI		HSU
	EC No: DATE: ENT NUMI	EC No: PDR-A150 DATE: 2015/12/ ENT NUMBER:	<u>DATE:</u> <b>2015/12/31</b> <u>ENT NUMBER:</u> <u>CRE</u>	ECR/ECN INFORMATION:         NO           EC No:         PDR-A150053         PRODUCT           DATE:         2015/12/31         NAME           ENT NUMBER:         CREATED / REVISE	EC No:         PDR-A150053 PRODUCT NAME         1 F           DATE:         2015/12/31         NAME	EC No: DATE:         PDR-A150053 PRODUCT NAME         PRODUCT NAME         1 PIN POGO PIN WITH HEAD PRODUCT NAME           ENT NUMBER:         CREATED / REVISED BY:         CHECKED BY:	EC No: DATE:         PDR-A150053 PRODUCT NAME         PIN POGO PIN WITH HOUSING           ENT NUMBER:         CREATED / REVISED BY:         CHECKED BY:         APPROV



7.4	Salt Spray Test	Duration: 48 hours exposure; Atmosphere:salt spray from a 5% solution. Temperature: 35 +1/-2°C EIA 364-26B	[Appearance]: no damage. [Contact Resistance]: 50 mΩ maximum
7.5	Thermal Shock	Place free situation samples in chamber with 10 cycles, and one duration is -55°C /(0.5h) → 25°C /(5minutes Max.) →85°C /(0.5h) →25°C /(5minutes Max.). EIA-364-32C	[Appearance]: no damage. [Contact Resistance]: 50 mΩ maximum
7.6	Hand Soldering	The terminal tested shall be heated to 2 millimeters from a tip of the terminal by a soldering iron to have capacity of 60 watts consumption.	At a temperature controlled of 350°C±  10°C for a period of 3±  0.5 seconds.

### **8.0 PACKAGING**

Parts shall be packaged to protect against damage during handling, transit and storage.

### 9.0 TEST GROUP

Test Group										
Test Items				Tes	t Se	que	nce	!		
rest items	Α	В	С	D	Е	F	G	Н	I	J
Contact Resistance	1,5	1,4	1,4	1,4	1,4	1,4	1,4	1,4		
Contact Current Rating										1
Durability	3									
Normal Force	2,6									
Vibration		2								
Mechanical Shock			2							
Fully compression	4	3	3	3	3	3	3	3		
High Temperature Exposure				2						
Low Temperature Exposure					2					
Humidity						2				
Salt Spray Test							2			
Thermal Shock								2		
Hand Soldering									1	
Sample(Pcs)	3	3	3	3	3	3	3	3	3	1

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PS-BC-0111			ТОМ		JERRY	KIMI.I	HSU	

### ACRON 文件制訂、修訂、廢止申請單

RD-PS-A-001-244

	RD-PS-A-001-244		
文件編號	PS-BC-0111	文件名稱	BTC35 Garles Alta
申請部門	<b>姜</b> 卷37	申請人	Edie By 12/
制訂單位	工程等	制訂人	Linda 日期 /3(i)
制		DIDR-A	150053
修訂			
□廢止原因說明			
相關單位			Ol/m 1/4
審查			Josephel/4 2016.
			Estre/4 2016
核			
准		-	/m /4/6