



#### 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: BTC10 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.	ltem	Test Condition	Requirements
5.1	Contact Resistance	Mate connector with circuit of 20mV, 100mA Max. Measured from pin side to shaft side, deflection 11.92 mm Working HEIGHT . EIA-364-23B	[Contact Resistance]: <mark>50</mark> mΩ maximum
5.2	Contact Current Rating	The connector temperature and test current shall be measured and recorded. ANSI/EIA-364-70	[Temperature rise ]: $30^\circ C$ Max.

REVISION:	ECR/ECN INFORMATION:			PRODUCT NO	BTC10 SERIES			SHEET No
С	<u>EC No:</u> DATE:	RD-T1500 2015/03/		PRODUCT NAME	1 PIN POGO PIN WITH HOUSING			<b>2</b> of <b>4</b>
DOCUMENT NUMBER: CRE			CRE	ATED / REVISE	ED BY:	CHECKED BY:	<u>APPROV</u>	ED BY:
PS-BC-0092		ТОМ		JERRY	KIMI.I	HSU		



# 6.0 MECHANICAL PERFORMANCE

Test Ref.	ltem	Test Condition	Requirements
6.1	Durability	Mate and un-mate contacts at a rate of 10~20 cycles/hr to 10,000 cycles. Deflection: 11.92 mm Working HEIGHT. EIA-364-09C	[Contact Resistance]: <mark>50</mark> mΩ Maximum,
6.2	Normal Force	Test speed of 25 mm/minute. Measure normal force at contact point, Deflection: 11.92mm Working HEIGHT from housin. EIA-364-04	[Normal force]: <mark>150</mark> gf 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		Te	st Con	dition	F	Requirements	5	
	7.1	High Te Exposu	mperature re	+	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	Humidit	у	e w 9 N a n	Test mated connector in chamber and expose to a temperature of $40 \pm 2^{\circ}$ 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		
<u>RE</u>	REVISION: ECR/ECN INFORMATIO		ION:	PRODUCT NO	BTC10 SERIES			SHEE	T No		
	С	<u>EC No:</u> DATE:	RD-T150 2015/03/		7 PRODUCT NAME 1 PIN POGO PIN V		PIN POGO PIN W	WITH HOUSING 3		<b>3</b> of	4
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	PS-BC-0092				TOM JERRY			KIMI.HSU			



# ARON PRODUCT SPECIFICATION

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 $350^{\circ}C \pm$ $10^{\circ}C$ for a period of $3\pm$ 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	Test Sequence									
	Α	В	С	D	Ε	F	G	Н		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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С		EC No:	RD-T1500	)37	PRODUCT	1 PIN POGO PIN WITH HOUSING		<b>4</b> of <b>4</b>	
	U	DATE:	2015/03/	06	NAME				
DOCUMENT NUMBER: CRE				CRE	ATED / REVISE	D BY:	CHECKED BY:	<u>APPROV</u>	ED BY:
PS-BC-0092					ТОМ		JERRY	KIMI.H	ISU

# ACCON 文件制訂、修訂、廢止申請單

	RD-PS-A-001->16	7	BTC 10		
文件編號	PS-BC-0092	文件名稱	Spec		
申請部門	工程考?	申請人		日期	03/26/15
制訂單位	工程考入	制訂人	Ţ	日期	03/06(5
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