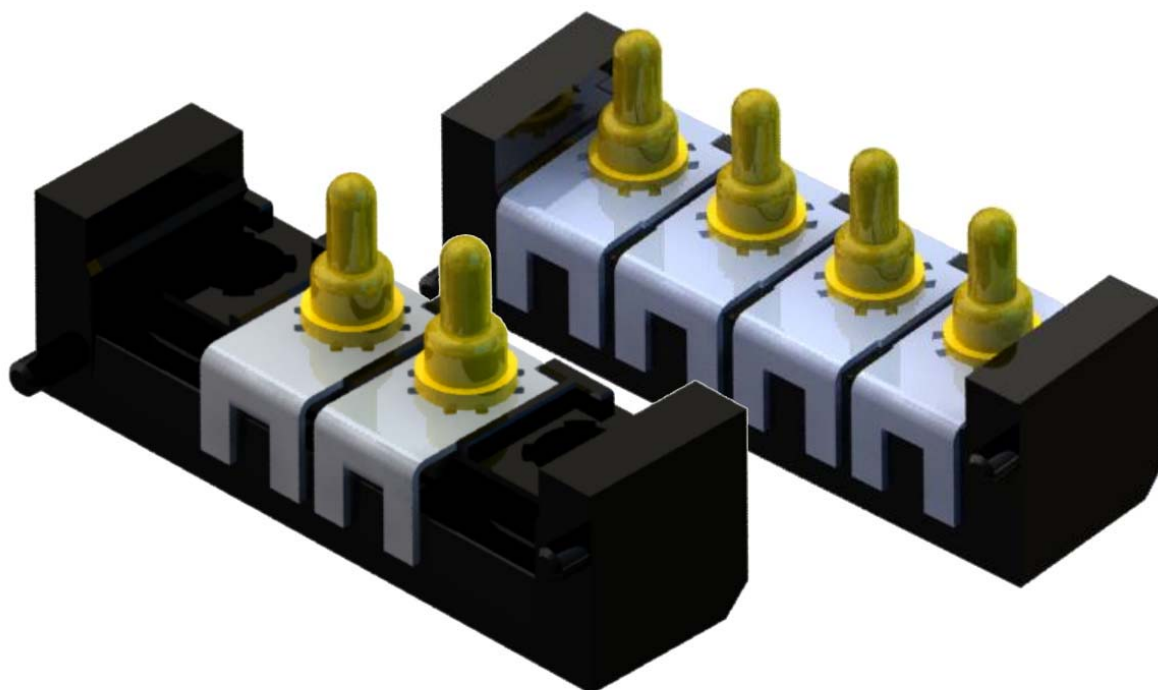




PRODUCT SPECIFICATION



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(NUCONN)

REVISION:	ECR/ECN INFORMATION:		PRODUCT NO	BTC03 SERIES	SHEET No
A	EC No:	NEW SPEC.	PRODUCT NAME	2 & 4 PIN Pogo pin Connector, PITCH=2.54mm	1 of 5
	DATE:	2016/08/30			
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:	APPROVED BY:
PS-BC-0114		LINDA		JERRY.TUNG	KIMI.HSU



PRODUCT SPECIFICATION

1.0 SCOPE

This specification defines the performance for the **2 & 4 PIN POGO** connector

2.0 PRODUCT DESCRIPTION

This Pogo-Pin consists of two & four contact pins, two & four springs, two & four solder pads, two fittings and a housing, For materials, plating see below Product Name: **BTC03 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)	1 Amp Max.
4.2	Rated Voltage	12V DC RMS
4.3	Operating temperature range	-40°C~ +85°C .
4.4	Dielectric Withstanding Voltage	500V AC

5.0 ELECTRICAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
5.1	Contact Resistance (LLCR)	Mate connector with circuit of 20mV, 100mA Max. Measured from pin side to shaft side, deflection 0.8 mm. EIA 364-23;	50 milliohms Max(Initial)
5.2	Insulation Resistance	Unmate & mate connectors: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground for 1 minute. EIA 364-21	100 Mega Ohm Min.
5.3	Dielectric Withstanding Voltage	Apply 500 VAC for 1 minute between adjacent terminals of an unmated connector. EIA 364-20	No breakdown;

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6.0 MECHANICAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
6.1	Durability	Operation Speed: 10~20cycles/minute. Durability Cycles: 10,000 Cycles EIA 364-09C	[Contact Resistance]: 50mΩMaximum,
6.2	Normal Force	Measure normal force at contact point, @0.8mm Deflection EIA-364-04	[Normal force]: 110g 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	<1μs discontinuity
6.4	Mechanical Shock	Accelerate Velocity: 490m/ s ² (50G) Waveform: 11ms Half-sine shock Velocity Change: 3.4m/s No. of Drops: 3 drops each to normal and reversed directions of X,Y and Z axes, totally 18 drops, passing 1mA current during the test. EIA 364-27B	<1μs discontinuity
6.5	Fully compression	Compress connector to @1.0mm Deflection by hand for 10sec	[Appearance]: no damage

7.0 ENVIRONMENTAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
7.1	Humidity	Mate connectors: expose to a temperature of 40±2°C with a relative humidity of 90~95% for 96hours Note: Remove surface moisture and air dry 48 hours prior to measurements. EIA 364-31B	[Appearance]: no damage [Contact Resistance]: 50 mΩ maximum
7.2	Low Temperature Exposure	48 hours at -40°C 1hours recovery time EIA 364-59	[Appearance]: no damage [Contact resistance]: 50 mΩ maximum
7.3	High Temperature Exposure	48 hours at +85°C Less than 25% relative humidity 1hours recovery time EIA 364-17B	[Appearance]: no damage [Contact resistance]: 50 mΩ maximum

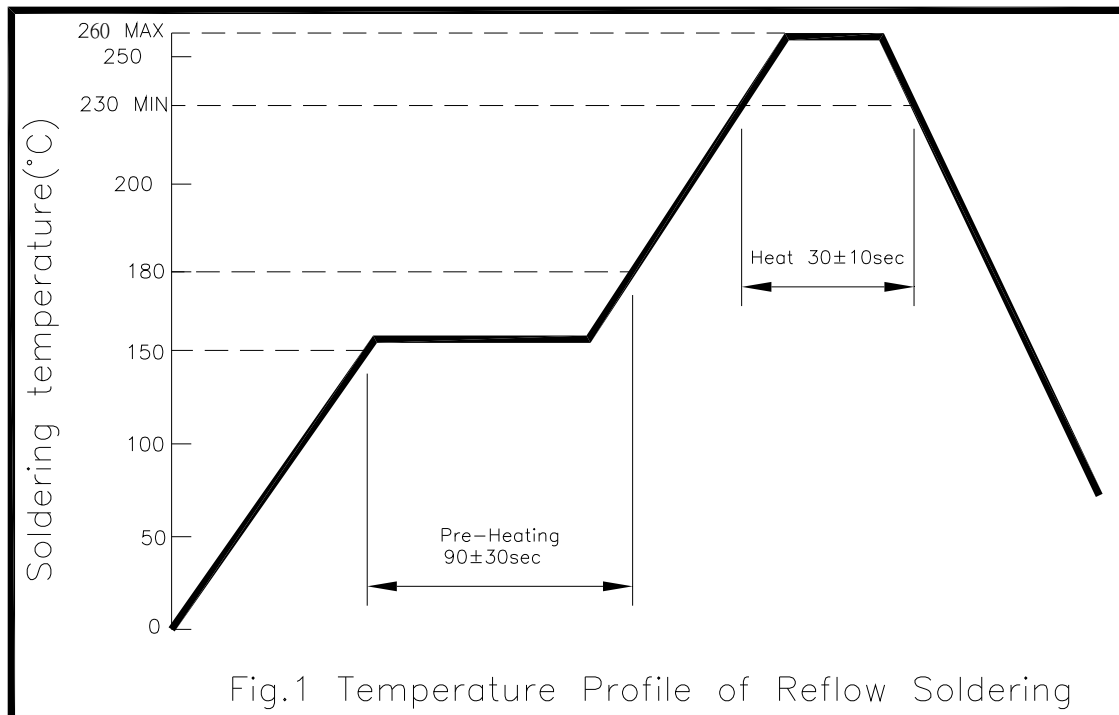
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7.4	Thermal Shock	Place free situation samples in chamber with 10 cycles, and one duration is -40°C/(0.5h) → 25°C/(5minutes Max.) → 85°C/(0.5h) → 25°C/(5minutes Max.). EIA-364-32C EIA-364-32C	[Appearance]: no damage. [Contact Resistance]: 50 mΩ maximum
7.5	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.
7.6	Solderability Test	Dip solder tails into the molten solder(held at 245±5°C for 3 ±0.5 sec. EIA 364-52	[Solder coverage]: 95% Min.
7.7	Resistance to reflow soldering heat	Place connector applicable P.C.B. footprint and float on solder bath at 250 +5/ -0°C Reference to following Table A and Fig.1. EIA 364-56	[Appearance]: no damage .

8.0 PACKAGING

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

9.0 RECOMMENDED REFLOW PROFILE



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PRODUCT SPECIFICATION

10.0 TEST GROUP

Test Group												
Test Items	Test Sequence											
	A	B	C	D	E	F	G	H	I	J	K	L
Contact Resistance(LLCR)	1,5	1,7	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,3	1,3
Insulation Resistance	2,4	2,6	2,4	2,4	2,4	2,4	2,4	2,4	2,4	2,4		
Dielectric Withstanding Voltage	3											
Durability		4										
Normal Force		3,5										
Vibration			3									
Mechanical Shock				3								
Fully compression					3							
Humidity						3						
Low Temperature Exposure							3					
High Temperature Exposure								3				
Thermal Shock									3			
Salt Spray Test										3		
Solderability Test											2	
Resistance to reflow soldering heat												2
Sample(Pcs)	3	3	3	3	3	3	3	3	3	3	3	3

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