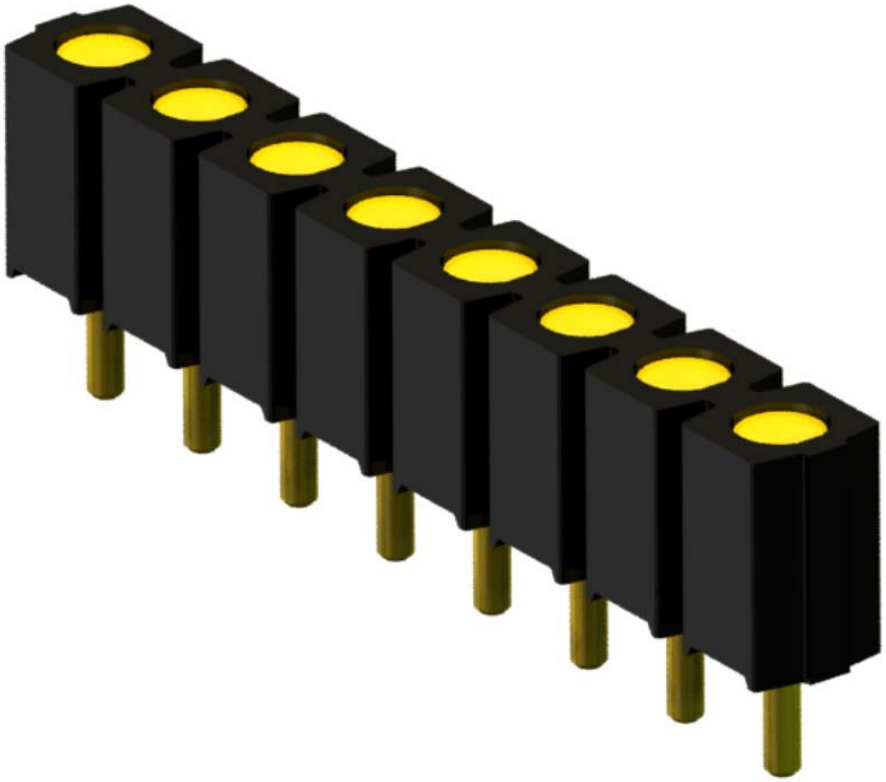
PRODUCT SPECIFICATION



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REVISION:	ECR/ECN INFORMATION:		PRODUCT NO	BTC19-A3-0804110	SHEET No
B	EC No:	RD-140500	PRODUCT NAME	8 PIN CYLINDER	1 of 5
	DATE:	2014/12/01			

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
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PRODUCT SPECIFICATION

1.0 SCOPE

This specification defines the related performance of the 8 PIN Cylinder connector.

2.0 PRODUCT DESCRIPTION

This Cylinder consists of eight contact pins, and a housing, For materials plating see below
Product Name: **BTC19-A3-0804110**

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. EIA-364-23B	[Contact Resistance]: 50 mΩ maximum
5.2	Insulation Resistance	apply a voltage of 500 VDC between adjacent terminals and between terminals to ground for 1 minute. EIA-364-21C	500 Mega ohms min
5.3	**Dielectric Withstanding Voltage**	Apply 500 VAC for 1 minute between adjacent terminals of an unmated connector. EIA-364-20C	No breakdown
5.4	**Contact Current Rating**	The connector temperature and test current shall be measured and recorded. ANSI/EIA-364-70	[Temperature rise]: 30℃ Max.

6.0 ENVIRONMENTAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
6.1	**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
6.2	**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
6.3	**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
6.4	**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
6.5	**Thermal Shock**	Place free situation samples in chamber with 10 cycles, and one duration is -55℃/(0.5h)➔ 25℃/(5minutes Max.) ➔85℃/(0.5h) ➔25℃/(5minutes Max.). EIA-364-32C	[Appearance]: no damage. [Contact Resistance]: 50 mΩ maximum
6.6	**Solder ability**	Dip solder tails into the molten solder(held at 245±5°C for 3 ±0.5 sec. EIA 364-52	Solder coverage: **95**% MINIMUM
6.7	**Solder Heat Resistance**	Place connector applicable P.C.B. footprint and float on solder bath at 260 ± 5° C for 8 - 12 seconds Reference to following Table A and Fig.1. EIA 364-56D	Visual: No Damage to insulator material

7.0 PACKAGING

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

8.0 RECOMMENDED REFLOW PROFILE

Table A:

Profile Feature	Specification
Average Ramp-Up Rate (TS_{max} to TP)	3℃/second max.
Preheat — Temperature Min. (TS_{min})	150℃
Preheat — Temperature Max. (TS_{max})	200℃
Preheat — Time (ts: TS_{min} to TS_{max})	60 ～ 120 seconds
Time maintained above — Temperature (T_L)	217℃
Time maintained above — Time (t_L)	60 ～ 150 seconds
Peak/Classification Temperature (Tp)	260℃+5 / -5℃
Time within 5 °C of actual Peak Temperature (tp)	8-12 seconds
Ramp-Down Rate	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

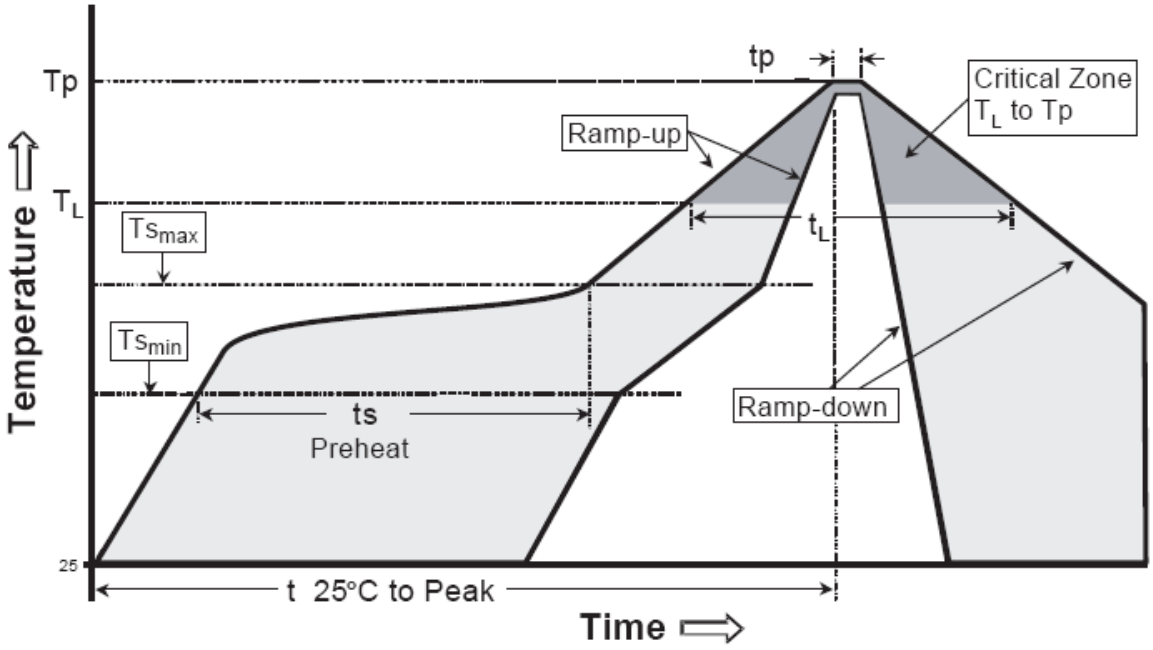

Fig.1.

9.0 TEST GROUP

Test Group									
Test Items	Test Sequence								
	A	B	C	D	E	F	G	H	I
Contact Resistance	*1,4*	*1,3*	*1,3*	*1,3*	*1,3*	*1,3*			
Insulation Resistance	*2*								
Dielectric Withstanding Voltage	*3*								
Contact Current Rating									*1*
High Temperature Exposure		*2*							
Low Temperature Exposure			*2*						
Humidity				*2*					
Salt Spray Test					*2*				
Thermal Shock						*2*			
Solder ability							*1*		
Solder Heat Resistance								*1*	
Sample(Pcs)	3	3	3	3	3	3	3	3	1