

**Standard Power Timer contact for p.c.b**

**1. Scope**

1.1 Contents.

This specification describes the design, the characteristic, the versions, the tests and the quality Requirements of the Standard power timer contact for p.c.b

1.2 Product List.

Description	Applicable part number
With Latch type	85047-1, 1-85047-1
Without Latch type	368028-1, 1-368028-1

Table 1

**2. Applicable Documents.**

The following documents form a part of this specification to the extent specified herein. In the case of a conflict between this specification and the specified documents, this specification has priority.

2.1 Other Standards.

- A. JIS C5402, 5.3, 5.4: Measuring methods and testing procedures for electromechanical components.
- B. IEC 512-2, 2a, 2b: Contact resistance.
- C. JIS C5402, 6.6, 6.19: Mating and unmating force.

**3. Description.**

**3.1 Contact Construct.**

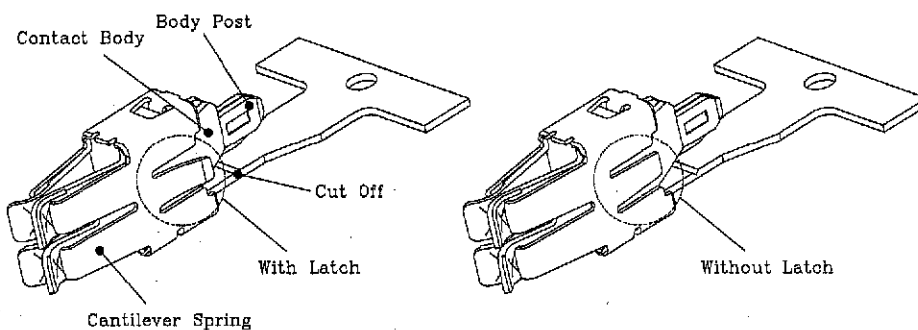


Fig 1

Body post shall be assembled at pcb hole with applicable insertion M/C  
Applicable mating tab size is 6.3 x 0.8mm, 5.8 x 0.8mm, 4.8 x 0.8mm.

**3.2 Materials :**

- A. Contact Body: pre-tinned CuNiSi Alloy.
- B. Cantilever Spring: Stainless steel.

**4. Requirements.**

**4.1 General Requirements.**

All tests executed with the individual components must comply with the inspection plan in this Specification.

- Number of samples; Min. 10.
- Temperature Range; -40°C ~ +130°C.

**4.2 Ratings.**

Current carrying capacity	Max. 30A
Maximum mating cycles	10
Temperature range	-40°C ~ +130°C

Table 2

4.3 Test Requirements.

4.3.1 Electrical & Mechanical Test procedure

NO	TEST DESCRIPTION	REQUIREMENTS	PROCEDURE
1	Dimension Check	According to Product Drawing	Measure Item : Terminal Height From P.C.B Surface after assembly
2	Resistance of assembled Contact between Mated Tab and Recep Terminal	Initial : 3 mΩ Max. After reliability Test : 6 mΩ Max.	* Test Voltage on open circuit : DC 13V * Test Current : 1 A Measure the Contact Resistance According to IEC 512-2 (see Fig. 2)
3	Mating and unmating Force	The following values apply to the first mating Cycle : Mating force 0.5 ~ 2.0 kgf Unmating force 0.2 ~ 0.7 kgf	Measure the required force to mate & unmate counterpart gauge tab with operating speed at 25mm/min.
4	Resistance to High Temperature.	* must Satisfy 80% of initial tab Inscr./Ext Force. * contact Resistance 6 mΩ Max.	Expose mated contact under the temperature at 120± 2°C for 120 hours
5	Current Cycle	Contact Resistance 6 mΩ Max.	Applied Current : 30 A Current Timing : 45 minutes "ON" 15 minutes: "OFF" make this 1 cycle Repeat 200 cycles at 25°C.
6	Temperature Rising	50°C Max	Temperature of test Room : 80°C Test Current ; 10, 15, 20, 25, 30A Impose each current of mated contact reaches to saturation Temperature.
7	Vibration Test	Electrical – discontinuity 10 μ sec Max Contact Resistance 6 mΩ Max.	Temperature of test Room : 80°C Test Current : 1 mA, 5V Vibration Frequency : 20 ~ 200 HZ Vibration Acceleration : 4.4G Vibration Direction : X, Y, Z Axis. Vibration Duration : 8 hours for each Axis. Related Test procedure : AMP 109-5202
8	Thermal Shock	Contact Resistance 6 mΩ Max.	high Temperature : 120°C per 1h. Low Temperature : -40°C per 1h. Marking this a cycle, Repeat 60 Cycles. Temperature exchange Time : within 3 minutes after exchange Time, the room temperature must be settled to 120°C± 3°C or -40°C ± 3°C Related Test procedure : AMP 109-5103

Table 3

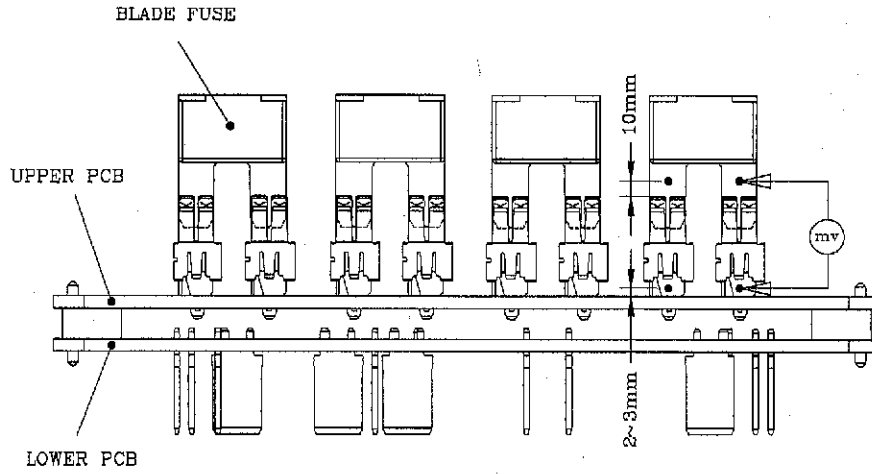


Fig. 2

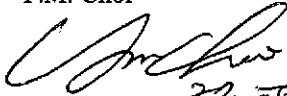
**5. Revision History**

Current Revision	New Revision	Changes	Reason for Change	EC No.
A	B	Revised	Material Change	FC00-0101-02

**6. SPECIFICATION APPROVAL**

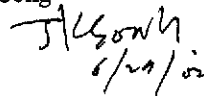
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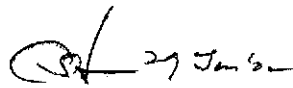
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