

## 8Pin Pucks Connector and PCBA

### 1.0 SCOPE

This Product Specification covers the requirement of the 8Pin Pucks connector and PCBA with series 105402/202677/203309 used in mobile phone.

### 2.0 PRODUCT DESCRIPTION

#### 2.1 PRODUCT NAME AND SERIES NUMBER (S)

Product name: 8Pin pucks connector and PCBA

Series number: 105402/202677/203309

Part number:

8 pin pucks: 105402-\*\*\*\*/203309-\*\*\*\*

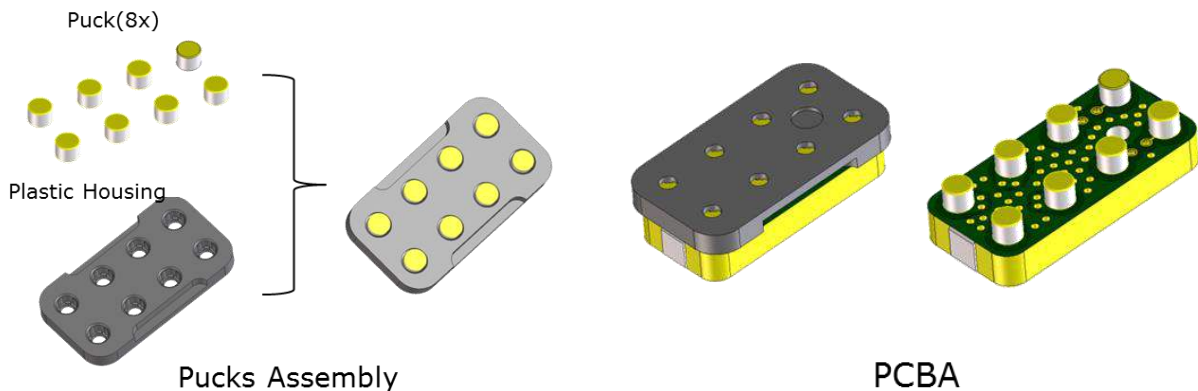
PCBA: 105402-\*\*\*\*/202677-\*\*\*\*

#### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See sales drawing SD-105402-002/2033090001-PSD/SD-105402-003/20267700\*\*-PSD

### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See sales drawings and other sections of this specification for the relevant reference documents. In cases where the specification differs from the drawings, the sales drawings take precedence.



### 4.0 RATINGS

#### 4.1 VOLTAGE

50 Volts DC Max.

#### 4.2 CURRENT

0.5 Amps Max. per contact

#### 4.3 TEMPERATURE

Operating: - 20°C to + 70°C

Storage : - 40°C to + 85°C

#### 4.4 HUMIDITY

Storage: +15~70% RH

Test : +40~85% RH

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DOCUMENT NUMBER: <b>1054020000</b>	CREATED / REVISED BY: <b>SIVIN WANG</b>	CHECKED BY: <b>ANSON YIN</b>	APPROVED BY: <b>ANSON YIN</b>

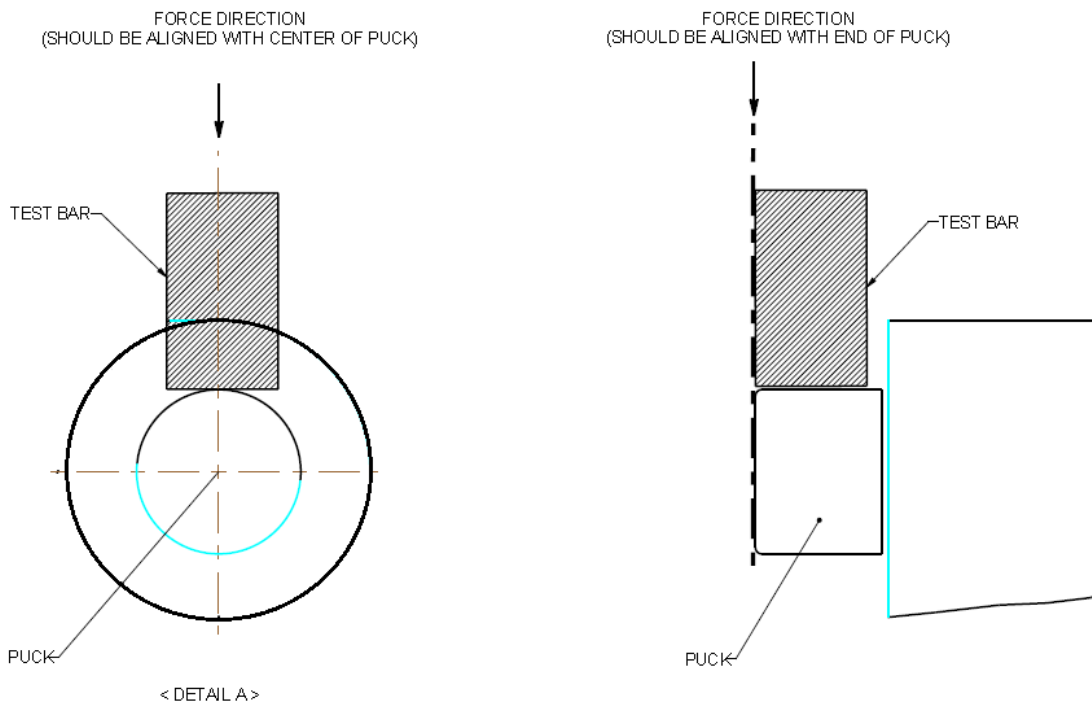
## 5.0 PERFORMANCE

### 5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.1.1	<b>Contact Resistance</b>	Mate connectors with dry circuit (20mV, 10mA Max) at min. deflection position	<b>10 milliohms Max.</b>

### 5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.2.1	<b>Pucks / Housing Retention Force</b>	Apply axial pull out force at the speed rate of 12.5 mm/min on the pucks assembled in the housing.	<b>1.0 N (0.10kgf) Min.</b>
5.2.2	<b>Peeling force (PCBA)</b>	<ul style="list-style-type: none"> <li>-Load speed : 2.5mm/min</li> <li>-Testing part should be fixed into test equipment not to have the moving and tilting during test</li> <li>-Test bar should push the puck on perpendicular direction</li> <li>-Test bar should be aligned with center of puck and end of puck</li> <li>-Test should have 3X reflow process</li> </ul>	<b>20N Min</b>



**Peeling force test method**

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## 5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.3.1	Solderability	Process simulation, reflow profiles shown in Appendix 1 Per <b>SMES-152</b>	Solder coverage: 95% Min. No mechanical damage or change to appearance.

The meaning of text “**No mechanical damage**” in the table above is:

- a. no significant corrosion at contact area
- b. no adhesion problem of plating
- c. no blistering of plating
- d. no flaking of plating
- e. no loosen parts
- f. no cracks on any parts

## 6.0 TEST GROUPS

Note: All test specimens shall pass the reflow process for 3 times except 5.2.1.

Test Item	Description	Pucks		PCBA	
		Group A	Group B	Group C	Group D
5.1.1	Contact Resistance			2	
5.2.1	Pucks / Housing Retention Force		1	3	
5.2.2	Peeling force				2
5.3.1	Solderability	1		1	1
<b>Sample Size</b>		5	5	5	5

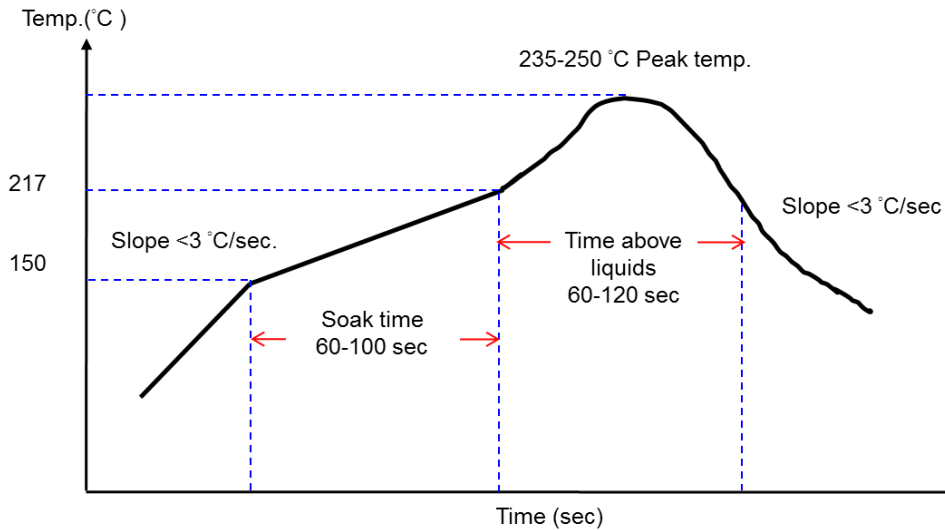
## 7.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage. The parts shall be carried in tape & reels inside boxes. For details refer to packaging spec.

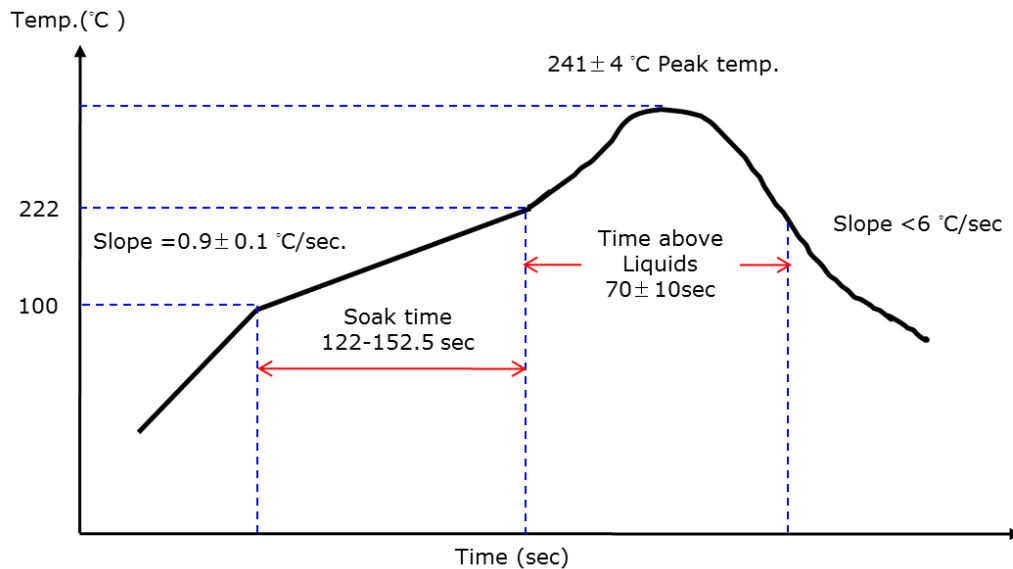
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**APPENDIX 1:** Reflow soldering profile for solderability testing and soldering heat resistance testing  
 The reflow profile specified in this section describes expected maximum heat exposure of components during the reflow process. Temperature is measured on top of component. All components have to tolerate at least this profile three times (3x) without affecting electrical performance, mechanical performance or reliability.

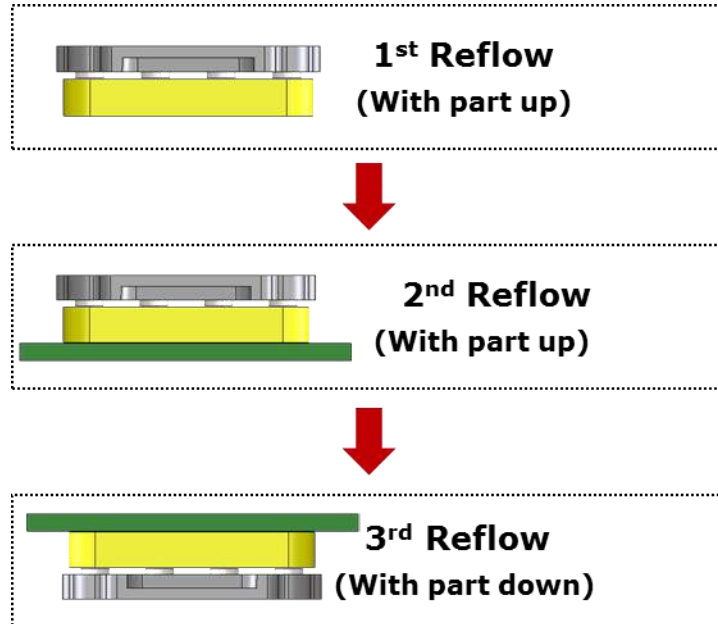
### 1<sup>st</sup> reflow profile



### 2<sup>nd</sup> and 3<sup>rd</sup> reflow profile



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