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**Solder paste — Part 2: Test methods for
solder particle shape, surface condition
judgment, and particle size distribution**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by The Japan Welding Engineering Society (JWES) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law. Consequently **JIS Z 3284:1994** has been withdrawn and partially replaced with this Standard.

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JIS Z 3284 series consists of the following 4 parts under the general title “*Solder paste* —”:

Part 1 : Kinds and quality classification

Part 2 : Test methods for solder particle shape, surface condition judgment, and particle size distribution

Part 3 : Test methods for printability, viscosity, slump and tackiness

Part 4 : Test methods for wettability, solderball and spread

Solder paste — Part 2 : Test methods for solder particle shape, surface condition judgment, and particle size distribution

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of IEC 61189-6 published in 2006 by incorporating the part corresponding to this Standard (particle size distribution measurement test) with some modifications of the technical contents to meet the real condition in Japan, but also adding some JIS specification content that is not given in the said corresponding International Standard (solder particle shape and surface condition judgment method).

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the shape, surface condition judgment test and particle size distribution measurement test of the solder particles of solder paste for soldering used for the wiring connection, connection of parts, etc. of electric equipment, electronic equipment, communication equipment, etc.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

IEC 61189-6 : 2006 *Test methods for electrical materials, interconnection structures and assemblies — Part 6 : Test methods for materials used in manufacturing electronic assemblies* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21-1.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 8034 *Acetone (Reagent)*

JIS K 8839 *2-Propanol (Reagent)*

JIS Z 3001 (series) *Welding and allied processes — Vocabulary*

JIS Z 3197 *Test methods for soldering fluxes*