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(JELMA/JSA)

**Lamps for road vehicles—
Part 3: Miniature lamps**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal of revision of Japanese Industrial Standard submitted by Japan Electric Lamp Manufacturers' Association (JELMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS C 7506-3:1999** is replaced with this Standard.

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JIS C 7506 series consists of the following 3 parts under the general title "*Lamps for road vehicles*":

Part 1: Dimensional, electrical and luminous requirements

Part 2: Performance requirements

Part 3: Miniature lamps

Lamps for road vehicles— Part 3: Miniature lamps

Introduction

This Japanese Industrial Standard was established in 1999 based on Section 1 and Section 2 of **IEC 60983**, and revised at this time to correspond to the revision of the said International Standard that took place in 2005. This Standard contains some **JIS** specifications that are not given in the corresponding International Standard.

The portions given continuous sidelines or dotted underlines and Annex JA are the matters not given in the corresponding International Standard. A list of the modifications, with their respective explanations, is given in Annex JB.

1 General

1.1 Scope

This Standard specifies requirements related to the life, torsion strength and basic requirements (dimensional, electrical and luminous) of miniature lamps (hereafter referred to as “lamps”) for use in road vehicles not included in **JIS C 7506-1**.

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

IEC 60983:2005 *Miniature lamps*

Section 1: General

Section 2: Lamps for supplementary purposes in road vehicles (MOD)

The symbols which denote the degree of correspondence in the contents between the corresponding International Standard and **JIS** are IDT (identical), MOD (modified) and NEQ (not equivalent) according to **ISO/IEC Guide 21**. This correspondence, however, does not involve Section 3 and Section 4 of the above International Standard, since they only contain requirements that are not related to miniature lamps for road vehicles, and therefore not corresponding to this Standard.

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 C 7506-1 *Lamps for road vehicles—Part 1: Dimensional, electrical and luminous requirements*

NOTE : Corresponding International Standard: IEC 60809 *Lamps for road vehicles—Dimensional, electrical and luminous requirements* (MOD)

JIS C 7506-2 *Lamps for road vehicles—Part 2: Performance requirements*

JIS C 7709-1 *Lamp caps and holders together with gauges for the control of interchangeability and safety—Part 1: Lamp caps*

NOTE : Corresponding International Standard: IEC 60061-1 *Lamp caps and holders together with gauges for the control of interchangeability and safety—Part 1: Lamp caps* (MOD)

JIS Z 8113 *Lighting vocabulary*

NOTE : Corresponding International Standard: IEC 60050-845 *International Electrotechnical Vocabulary. Lighting* (MOD)

1.3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS C 7506-1**, **JIS C 7506-2** and **JIS Z 8113** and the following apply.

1.3.1 truncated average life

arithmetic mean of a number of individual life test results, where the test for the purpose of this calculation is considered to be terminated after a predetermined period

1.4 Numbering system for lamp data sheets

The numbering of lamp data sheets shall be such that a four-digit number and the letter “J” are attached after **C 7506-3-JIS-**, which are further followed by one-digit number indicating the edition of the data sheet.

Example: **C 7506-3-JIS-0470J-1**

2 Requirements and test conditions

2.1 General requirements

Electrical and photometric measurements shall be carried out at the test voltage.

2.2 Marking

2.2.1 Marking on lamps

2.2.1.1 Each lamp shall be legibly and durably marked with the following information to ensure correct replacement:

However, the nominal voltage need not be marked on those lamps for which only 12 V types are specified and whose maximum allowable bulb diameter is 7.5 mm or less. Also, the symbol “W” meaning nominal wattage need not be marked on lamps having a maximum allowable bulb diameter of 7.5 mm or less.

- a) Abbreviation of the manufacturer or the responsible vendor, preferably a registered trade name.
- b) Nominal voltage
- c) In addition to the above, other information, e.g. nominal wattage may be marked.

2.2.1.2 Compliance is checked as follows:

- a) Visual check of existence and legibility of the marking
- b) Endurance test method for the marking is such that the marking of unused lamp is rubbed by hand with a smooth cloth dampened with water for a period of 15 s. After this test the marking shall be legible.

2.2.1.3 When the marking is made on the bulb, the luminous characteristics shall not be affected.

2.2.2 Marking on packaging

The following items shall be marked on each package container:

- a) Abbreviation of the manufacturer or the responsible vendor, preferably a registered trade name
- b) Type designation (in accordance with **1.4.2** of **JIS C 7506-1**. For the lamps not dealt with in the corresponding International Standard, the type designation may consist of second item only)
- c) Nominal voltage and nominal wattage (may be omitted if already included in the type designation)

2.3 Marking of instructions for use

For correct use by the users, precautions stating the following purport shall be widely known by means of instruction manual, printing on package container and so on:

- a) The lamp is hot during operation and immediately after extinction, therefore it shall not be touched by the hand or skin.
- b) If the lamp is operated under contaminated condition, the clearness of the bulb can be reduced due to deterioration. To avoid this, lamps should not be handled directly with bare hands—use of clean gloves should always be ensured. If touched, the bulb shall be wiped clean with a soft cloth moistened with alcohol before being lit.
- c) For halogen lamps, due to the high inner pressure of their glass bulbs, when dropped, hit or damaged, halogen lamps can break scattering fragments all over. Therefore, they should be handled with utmost care. Filament lamps with the bulb scratched or otherwise damaged shall not be used.
- d) When exchanging lamps, making sure that the new lamp has the same nominal voltage, wattage and cap shape as indicated on the old lamp, fix the new lamp securely into the socket.

NOTE : For high-pressure gas-filled lamps for which some protective means are necessary at their handling, the protective means shall be indicated.

2.4 Lamp dimensions

Lamp dimensions shall comply with the relevant limit values stated in the lamp drawing on relevant lamp data sheet.