

JIS

JAPANESE INDUSTRIAL STANDARD

Cigar lighters for automobiles

JIS D 5807—1991

Translated and Published

by

Japanese Standards Association



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Cigar lighters for automobiles

D 5807-1991

1. Scope

This Japanese Industrial Standard specifies cigar lighters of electric heating type employing bimetals for use in automobiles (hereafter referred to as the "lighters").

Remarks 1. The following Standards are cited in this Standard:

- JIS B 0209 Limits of Sizes and Tolerances for Metric Coarse Screw Threads
- JIS C 1102 Electrical Indicating Instruments
- JIS C 1302 Insulation Resistance Testers (Battery Operated)
- JIS C 2520 Wires and Rolled Wires for Electrical Heating
- JIS C 2530 Thermostat Metal Sheets for Electric Apparatus
- JIS C 6401 Fixed Wire Wound Resistors - Power Type
- JIS D 0032 Symbols for Controls, Indicators and Tell-Tales for Automobiles
- JIS D 1601 Vibration Testing Methods for Automobile Parts
- JIS D 5403 Cable Terminals for Automobiles
- JIS Z 8703 Standard Atmospheric Conditions for Testing

2. The units and numerical values given in { } in this Standard are based on traditional units and are appended for informative reference.

2. Classification

Lighters are classified as shown in Table 1, according to the depth of socket, mounting method, nominal voltage and existence or nonexistence of illumination.

Table 1. Classification of lighters

Symbol of class	Depth of socket	Mounting method	Nominal voltage	Existence of illumination
1 S	31 mm	Screw type	12 V or 24 V	Presence or absence
2 S	27 mm	Screw type		
2 T		One-touch type		
3 T	22 mm	One-touch type		

Remarks: See Attached Fig. 1 for the name and mounting method of each part and Attached Fig. 2 for the depth of socket.

3. Performances

When the tests are carried out as specified in 8., the performances of lighters shall be as shown in Table 2. However, item (8) in Table 2 is not applicable for lighters not equipped with a fuse.

Table 2. Performances

Item		Performances	Subclause for test method
(1) Current consumption		For a lighter of nominal voltage 12 V: 10 A max. For a lighter of nominal voltage 24 V, with resistor 10 A max. without resistor 5 A max.	8.2
(2) Heat retentivity		380°C min. ⁽¹⁾	8.3
(3) Reset time		20 s max.	8.4
(4) Insulation resistance		1 MΩ min.	8.5
(5) Resistance to vibration		Loosening shall not appear on mounted part, fastened part by screw, or caulked part, and harmful abnormal sound shall not occur. Performances of (2) and (3) shall be satisfied after the test.	8.6
(6) Endurance		Performances of (1), (2), (3) and (4) shall be satisfied after the test.	8.7
(7) Operating force	Push-in force	15 to 40 N {1.5 to 4.1 kgf}	8.8 (1)
	Pull-out force	5 to 40 N {0.5 to 4.1 kgf}	8.8 (2)
(8) Fuse performance	Voltage drop	0.35 V max.	8.9 (1)
	Repetitive current flow	No abnormality shall appear on the fuse.	8.9 (2)
	Current interruption	The fuse shall operate normally.	8.9 (3)
(9) Strength of terminal		No detrimental deformation, loosening on terminal fixing parts, play on lighter mounting parts, or other abnormality shall appear.	8.10
(10) Strength of mounting part		No abnormality shall appear on the mounting part or others.	8.11

Note ⁽¹⁾ The temperature at which cigarettes are ignited.

4. Construction

4.1 Construction in general Lighters shall be constructed as follows: