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**Determination of thermal diffusivity
for heat dissipation graphite sheet
by a laser spot periodic heating
radiation thermometry method**

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Contents

		Page
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Measurement of thermal diffusivity	4
5.1	Shape of sample	4
5.2	Apparatuses and instruments	4
5.3	Measurement procedure	5
5.4	Method for obtaining thermal diffusivity	6
5.5	Re-measurement	7
6	Report	7
Annex A (informative)	Example of shapes of sample bench and sample holder	9
Annex B (informative)	Examples of methods for determination of modulation frequency and determination of thermal light quantity	10
Annex C (informative)	Calculation method of thermal conductivity	12
Annex D (informative)	Obtaining method of thermal diffusivity not affected by thermal light quantity	13
Annex E (informative)	Verification of measurements using reference material for thermal diffusivity	15

Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

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Determination of thermal diffusivity for heat dissipation graphite sheet by a laser spot periodic heating radiation thermometry method

1 Scope

This Japanese Industrial Standard specifies the basic idea and the obtaining method for the thermal diffusivity of heat dissipation graphite sheet (hereafter, referred to as the graphite sheet) in the in-plane direction by the laser spot periodic heating radiation thermometry method.

This Standard covers the graphite sheets made of graphite only, having the thickness of 100 μm or less.

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 B 7502 *Micrometers*

JIS R 1600 *Glossary of terms relating to fine ceramics*

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS R 1600**, and the following apply.

3.1

graphite sheet

sheet made of graphite for heat dissipation

3.2

thermal diffusivity, α

value indicating the propagation rate of temperature in the in-plane direction of graphite sheet

If the in-plane direction and the thickness direction need to be distinguished, α_v and α_H shall apply, respectively.

3.3

thickness, d

geometric thickness of graphite sheet

3.4

spot diameter, σ

irradiation diameter of heating laser on the surface of sample