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**General rules of passive devices for fiber
optic transmission**

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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 for revision of Japanese Industrial Standard submitted by Optoelectronics Industry and Technology Development Association (OITDA)/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 5900: 2006** is replaced with this Standard.

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General rules of passive devices for fiber optic transmission

1 Scope

This Japanese Industrial Standard is the general rules of passive devices for fiber optic transmission using silica glass optical fibers, and specifies general common items such as terms and definitions, and ratings of fiber optic passive components.

NOTE : This Standard specifies common items among standards of optic passive components shown below.

JIS C 5910 *General rules of optical branching devices (Non-wavelength selective branching devices)*

JIS C 5912 *General rules of wavelength switches*

JIS C 5914 *General rules of optical circulator*

JIS C 5916 *General rules of dispersion compensators for fiber optic transmission*

JIS C 5920 *General rules of optical attenuators*

JIS C 5925-1 *Fiber optic WDM devices — Generic specification*

JIS C 5930 *General rules of optical switches*

JIS C 5932 *General rules of optical isolator*

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 60068-1 *Environmental testing Part 1 : General and guidance*

JIS Z 8601 *Preferred numbers*

3 Terms and definitions

For the purposes of this Standard, the following terms and definitions apply.

3.1 Basic terms and definitions

3.1.1 connecting

structural form to connect between fiber optic components, between optical fibers or between an optical fiber and a fiber optic component, and to transmit the light between them

There are a connector plug type, connector receptacle type and fiber pigtail type.

3.1.2 plugged connecting

connecting by connector plug

A connector plug is a component to be attached to the end part of optical fiber in order to connect between fiber optic components, between optical fibers or between an optical fiber and a fiber optic component, which has a ferrule to hold and fix the optical fiber.

3.1.3 receptacle connecting

connecting by connector receptacle

A connector receptacle is a component to be attached to a fiber optic component in order to connect between fiber optic components, between optical fibers or between an optical fiber and a fiber optic component, which has the structure for mating a connector plug and the function for positioning a ferrule by an internal sleeve.

3.1.4 pigtailed connecting

connecting by fiber pigtail

A fiber pigtail is an optical fiber that an optical connector or a fiber optic component is attached to one end and the other end is exposed without attaching an optical connector or a fiber optic component.

3.1.5 port

part allowing incidence/emission of light or both in a fiber optic component, which is connected to optical fiber or other fiber optic component

There are a connector plug type, connector receptacle type and fiber pigtail type according to the connecting thereof.

3.1.6 input port

port used for incidence of light

3.1.7 output port

port used for emission of light

3.1.8 rating

basic conditions required for actuation of fiber optic component in a suitable state

3.1.9 nominal value

numerical value to represent the specification value of fiber optic passive component

3.1.10 standard condition

environmental condition to be referred when performances of fiber optic passive component are evaluated

3.1.11 ambient temperature

temperature around a fiber optic passive component

Unless otherwise specified, it refers to the air temperature around it.