

Integrated optics - Vocabulary - Part 2: Terms used in classification

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 11807-2:2005 sisaldab Euroopa standardi EN ISO 11807-2:2005 ingliskeelset teksti.

Käesolev dokument on jõustatud 28.04.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 11807-2:2005 consists of the English text of the European standard EN ISO 11807-2:2005.

This document is endorsed on 28.04.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This part of ISO 11807 defines terms used in the classification of integrated optical elements, integrated optical chips and integrated optical devices, which find applications, for example, in the fields of optical communications and sensors.

Scope:

This part of ISO 11807 defines terms used in the classification of integrated optical elements, integrated optical chips and integrated optical devices, which find applications, for example, in the fields of optical communications and sensors.

ICS 01.040.31, 31.260

Võtmesõnad:

ICS 01.040.31; 31.260

English version

Integrated optics – Vocabulary

Part 2: Terms used in classification
(ISO 11807-2:2001)

Optique intégrée – Vocabulaire –
Partie 2: Termes utilisés pour la
classification (ISO 11807-2:2001)

Integrierte Optik – Begriffe – Teil 2:
Begriffe für die Klassifizierung
(ISO 11807-2:2001)

This European Standard was approved by CEN on 2005-02-07.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: 36, rue de Stassart, B-1050 Brussels

Foreword

International Standard

ISO 11807-2:2001 Integrated optics – Vocabulary – Part 2: Terms used in classification, which was prepared by ISO/TC 172 'Optics and optical instruments' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 123 'Lasers and laser-related equipment', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 2005 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 11807-2:2001 was approved by CEN as a European Standard without any modification.

Introduction

Integrated optical devices are classified using three major fields based on user-oriented criteria. In the following text, the attribute "integrated optical" will usually be omitted.

The first criterion for classification is that the devices may be single-mode or multi-mode components.

Secondly, integrated optical devices are classified according to complexity of the configuration (see clause 2 and Figure 1: elements, chips, and devices).

The third criterion for classification is the function of the component. In 2.2, components are classified according to a general definition of the function, (passive, controllable, active). In 2.3, more specific subclassification is made according to functional criteria. The functional classification is defined for integrated optical elements, but can also be used in a similar manner for chips and devices. In the latter cases, the classification refers to the element of highest functional complexity (i.e. passive, controllable, active).

1 Scope

This part of ISO 11807 defines terms used in the classification of integrated optical elements, integrated optical chips and integrated optical devices, which find applications, for example, in the fields of optical communications and sensors.

NOTE Basic terms and definitions are given in ISO 11807-1.

2 Terms and definitions

2.1 Types of component configuration

2.1.1 integrated optical element

optical element which performs a basic function of integrated optics

See Figure 1.

2.1.2 integrated optical chip

monolithic unit which contains at least one integrated optical element

See Figure 1.

2.1.3 integrated optical device

packaged integrated optical chip

NOTE The packaging may consist at a minimum of one optical input and/or output connection and/or electrical connections and/or a housing.

See Figure 1.

1 Domaine d'application

La présente partie de l'ISO 11807 définit les termes utilisés pour la classification des éléments optiques intégrés, des circuits optiques intégrés et des dispositifs optiques intégrés, qui trouvent leurs applications, par exemple, dans les domaines des communications optiques et des capteurs.

NOTE Les termes fondamentaux et leurs définitions sont donnés dans l'ISO 11807-1.

2 Termes et définitions

2.1 Types de configuration de composants

2.1.1 élément optique intégré

élément optique qui assure une fonction de base de l'optique intégrée

Voir Figure 1.

2.1.2 circuit optique intégré

unité monobloc qui contient au moins un élément optique intégré

Voir Figure 1.

2.1.3 dispositif optique intégré

circuit optique intégré conditionné

NOTE Le conditionnement peut consister au moins en une connexion optique d'entrée et/ou de sortie, et/ou des connexions électriques et/ou un logement.

Voir Figure 1.