



**SLOVENSKI STANDARD**  
**SIST EN 120002:2002**

**01-september-2002**

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**Blank detail specification: Infrared emitting diodes, infrared emitting diode arrays**

Blank Detail Specification: Infrared emitting diodes, infrared emitting diode arrays

VFB: Infrarot emittierende Dioden und infrarot emittierende Dioden-Zeilen

SPC: Diodes émettrices en infrarouge, réseaux de diodes émettrices en infrarouges

**Ta slovenski standard je istoveten z: EN 120002:1992**

[SIST EN 120002:2002](https://standards.iteh.ai/catalog/standards/sist/7d363327-fcd9-4927-84c6-7759a47e7717/sist-en-120002-2002)

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**ICS:**

31.260	Optoelektronika, laserska oprema	Optoelectronics. Laser equipment
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**SIST EN 120002:2002**

**en**

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EUROPEAN STANDARD

EN 120002

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 1992

UDC:

Supersedes CECC 20001 Issue 1:1983

Descriptors: Quality, electronic components, diodes; diode arrays

English version

## Blank Detail Specification: Infrared emitting diodes, infrared emitting diode arrays

Spécification Particulière Cadre: Diodes  
émettrices en infrarouge, réseaux de diodes  
émettrices en infrarouge

Vordruck für Bauartspezifikation: Infrarot  
emittierende Dioden und infrarot emittierende  
Dioden-Zeilen

### iTeh STANDARD PREVIEW

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This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 27 January 1992. CENELEC members are bound to comply with CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the General Secretariat of the CECC or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CECC General Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

## CECC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

## Foreword

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This European Standard was prepared by CECC WG 20, "Opto-Electronic Components and Liquid Crystal Devices".

The text of the draft based on document CECC 20002 Issue 1:1983 was submitted to the formal vote for conversion to a European Standard; together with the voting report, circulated as document CECC(Secretariat)2999 the following documents were approved by CECC as EN 120002 on 27 January 1992:

CECC 20002 Issue 1:1983 with Amendment 1 [SIST EN 120002:2002](#)

The following dates were fixed: <https://standards.iteh.ai/catalog/standards/sist/7d363327-fcd9-4927-84c6-7759a47e7717/sist-en-120002-2002>

- latest date of announcement of the EN at national level (doa) 1992-12-22
- latest date of publication of an identical national standard (dop) 1993-06-22
- latest date of declaration of national standards obsolescence 1993-06-22
- latest date of withdrawal of conflicting national standards (dow) 2002-12-22

European Committee for Electrotechnical Standardization (CENELEC)  
Cenelec Electronic Components Committee

**CECC**



Système Harmonisé d'Assurance de la Qualité  
des Composants Electroniques

SPECIFICATION PARTICULIERE CADRE:

**DIODES EMETTRICES  
EN INFRAROUGE,  
RESEAUX DE DIODES  
EMETTRICES EN INFRAROUGE**

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Harmonized System of Quality Assessment for  
Electronic Components

SIST EN 120002:2002

BLANK DETAIL SPECIFICATION:

**INFRARED EMITTING DIODES,  
INFRARED EMITTING DIODE  
ARRAYS**

Harmonisiertes Gütebestätigungssystem für  
Bauelemente der Elektronik

VORDRUCK FÜR  
BAUARTSPEZIFIKATION:

**INFRAROT EMITTIERENDE  
DIODEN UND  
INFRAROT EMITTIERENDE  
DIODEN-ZEILEN**

**1**

Edition  
Issue  
Ausgabe

**CECC 20002**

1983

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## Foreword

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The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby accepted by all member countries without further testing.

This document has been formally approved by the CECC, and has been prepared for those countries taking part in the System who wish to issue national harmonized specifications for INFRARED EMITTING DIODES, INFRARED EMITTING DIODE ARRAYS. It should be read conjunction with document CECC 00100: Basic Rules (1974).

## Preface

This blank detail specification was prepared by CECC Working 20: "Semiconductor optoelectronic and liquid crystal devices". It is one of a series of blank detail specifications for semiconductor devices, based on the generic specification CECC 20000.

## Voting

The text of this blank detail specification was circulated to the CECC for voting in the documents indicated below, and was ratified by the President of the CECC for printing as a CECC specification.

Document	Voting date	Report on the voting
CECC(Secretariat)1089	november 1981	CECC(Secretariat)1217
CECC(Secretariat)1090	november 1981	CECC(Secretariat)1216

NOTE This specification is published initially in English and French. The German text will follow as soon as it has been prepared.

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INFRARED EMITTING DIODES, INFRARED EMITTING DIODE ARRAYS					
[Name (address) of responsible ONH (and possibly of body from which specification is available)] ①	Page of	CECC 20002-XXX ② [CECC detail specification number plus issue number and/or date]	E		
ELECTRONIC COMPONENT OF ASSESSED QUALITY IN ACCORDANCE WITH: CECC 20000, issue . . . [and national references if different] ③	[National number of detail specification This box may not be used if National number includes CECC number] ④				
<b>1 Mechanical description</b> ⑦ Either outline references (code A) or base and case references (codes B + C): — from IEC 191-2: — national [if desired]  OUTLINE DRAWING AND CONNECTIONS (Terminal connected to case, if any) [The outline drawing may correspond to the device itself and/or the device with its mounting clip] [may be transferred to, or given with more details, in clause 9 of this specification] MARKING: letters and figures/colour code [see 2.5 of CECC 20000 and/or clause 6 of this specification] Polarity indication if special method is used	<b>DETAIL SPECIFICATION FOR:</b> ⑤ [Type number (s) of relevant device (s) and, if appropriate structurally similar devices]  ORDERING INFORMATION: see clause 7 of this specification				
	<b>2 Short description</b> ⑥ IR EMITTING DIODES/IR EMITTING DIODE ARRAYS  Semiconductor material: Ga P/... Encapsulation: metal/glass/plastic/... Application:  Power: ambient-rated ( $T_{amb}$ ) case-rated ( $T_{case}$ )		[Some important quick reference data, for example device narrow beam may be added]		
	<b>3 Level (s) of quality assessment</b> ⑧ [if relevant]				
<b>4 Limiting values (Absolute maximum rating system)</b> ⑨ These apply per diode over the operating temperature range unless otherwise stated. X denotes that a value shall be inserted in the detail specification					
Clause CECC 20002	[Repeat only clause numbers used, with text. Additional values, if any, shall be given at the appropriate place without clause number (s). Curves should preferably be given in clause 9 of this document.]	Symbol	Value		Unit
4.1	Operating ambient or case temperatures	$T_{amb/case}$	X	X	°C
4.2	Storage temperature	$T_{stg}$	X	X	°C
4.3	Soldering temperature Soldering time and minimum distance to case shall be given [Recommended mounting conditions (temperature, duration...) may be given in clause 9.1 of this document]	$T_{sld}$		X	°C
4.4	Reverse voltage	$V_R$		X	V
4.5	Continuous forward current at operating ambient or case temperature of 25 °C, with temperature derating curve if necessary (see 9.2)				
4.5.1	For diode arrays, where appropriate, all diodes operating	$I_{F(tot)}$		(X)	A