

ICS 31.080.01

CCS L 40



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11499-2026

Replacing GB/T 11499-2001

Letter symbols for discrete semiconductor devices

半导体分立器件文字符号

Issued on: March 31, 2026

Implemented on: October 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope
- 5 Rectifier Diodes
- 6 Signal, switch, and regulating diodes
- 7 Thyristors
- 8 Bipolar Transistors
- 9 Field-Effect Transistors

1 Scope

GB/T 11499-2026 is the Chinese national standard covering the letter symbols of a semiconductor datasheet - VCEO, IDSS, RDS(on), tRR and the rest, each defined so that a parameter means the same thing on any manufacturer's sheet. At 21,500 words it is the reference behind every discrete device specification. It replaces GB/T 11499-2001 and has been in force since 1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, replacing GB/T 11499-2001. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document defines discrete semiconductor devices, including rectifier diodes, signal, switching and regulating diodes, thyristors, and bipolar transistors. The text refers to diodes and transistors in applications such as field-effect transistors, insulated-gate bipolar transistors, insulated-gate power semiconductor devices, and microwave applications. symbol. This document is applicable to the compilation of standards and product technical data related to semiconductor discrete devices.

4.General Requirements The letter symbols for semiconductor discrete devices shall comply with all requirements specified in Chapter 4 of GB/T 17573-2026 and this document. In the event of any discrepancy between the requirements of this document and GB/T 17573-2026, the text and symbols specified in this document shall prevail.

5 Rectifier Diodes

The letter symbols for rectifier diodes are shown in Table 1.

6 Signal, switch, and regulating diodes

6.1 Meaning of Subscripts The meanings of the subscripts for text symbols are as follows:

b) K,k. 1) Cathode (applicable to signal and switching diodes); 2) Inflection point (applicable to current regulating diodes).

d) S,s. 1) Storage, preservation (applicable to signal and switching diodes); 2) Adjustment (applicable to current adjustment diodes).

e) Z,z. Working (applicable to voltage reference diodes and voltage regulation diodes).

f) L. Limit (applicable to current regulating diodes).

6.2 Signal and Switching Diode Symbols The letter symbols for signal and switching diodes are shown in Table 2.

6.3 Text Symbols for Voltage Reference Diodes and Voltage Regulating Diodes The letter symbols for voltage reference diodes and voltage regulation diodes are shown in Table 3.

6.4 Current Adjustment Diode Symbol The letter symbols for current regulating diodes are shown in Table 4.

7 Thyristors

7.1 Meaning of Subscripts The meanings of the subscripts for text symbols are as follows:

b) B. Offset, only used as the last subscript;

c) B. Basic, only when used as the last subscript;

d) (BO). transition;

e) (com). Reversal, only when used as the fourth subscript;

f) D,d. Discontinuity state;

i) G, g. gate pole;

j) G. Gate control;

l) h. Maintain off;

m) K,k. cathode;

p) R, (REC). Reverse recovery, only in IRM, IR(REC) or IRM(REC);

q) RC. Reverse conduction;

s) Sus, sus. to maintain;

t) T. normal state;

8 Bipolar Transistors

8.1 Meaning of Subscripts The meanings of the subscripts for text symbols are as follows:

- b) C,c. Collectors;
- c) E, e. emitter;
- f) R,r. Specified impedance (not used as the first subscript);
- g) sat. saturated;
- h) X. The specified circuit;
- j) T. Transformation.

8.2 Bipolar Transistor Text Symbol The alphanumeric symbols for bipolar transistors are shown in Table 6.

8.3 Text symbol for paired bipolar transistors The alphanumeric symbols for paired bipolar transistors are shown in Table 7.

8.4 Text symbol for resistor-biased transistors The alphanumeric symbols for resistor-biased transistors are shown in Table 8.

9 Field-Effect Transistors

9.1 Meaning of Subscripts The meanings of the subscripts for text symbols are as follows:

- a) D,d. Drain electrode;
- c) S,s. source or short-circuit terminal;
- d) B,b;U,u. substrate;
- e) T;th;(TO). Threshold;
- f) O. Terminal short circuit;
- g) R. Terminal connected to resistor;
- h) X. Terminal is connected to the specified gate-source voltage;
- i) pl. platform.

9.2 Text Symbol for Field-Effect Transistor The letter symbols for field-effect transistors are shown in Table 9. GB/T 11499-2026. Symbols for Discrete Semiconductor Devices ICS

40 National Standards of the People's Republic of China Replaces GB/T 11499-2001
Semiconductor discrete device text symbols Published on 2026-03-

31 Implemented on October 1, 2026 State Administration for Market Regulation The State Administration for Standardization issued a statement.