

CONFIRMED
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Electronic parts of assessed quality —

Silicon avalanche rectifier diode

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 11 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date	Comments

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1. **Specifications CV7667-CV7668 Issue 1 dated 12 November 1965 with their existing amendments which are reproduced below are hereby adopted as BS 9300 C667-668.**
2. Devices inspected, released and supplied to this specification shall be marked CV7667-CV7668, as appropriate, and, where applicable with the letters KB.
- 3 The references to "Military specification", "Commercial equivalents", "Reliability assurance provisions" or requirements and "Preparation for delivery" shall be disregarded.
4. In the Groups A, B and C inspection tables the references in the "K1007/NATO Ref" column shall be superseded by the appropriate reference given in BS 9300 Appendix C (Tables 1 to 5 inclusive).
5. Additional requirements not covered by BS 9300 Appendix C are:
 - Page 2.* NATO Stock Number.
Against each CV type number, delete "5960" and substitute "5961".
 - Page 3.* Group A. Subgroup 2, Avalanche voltage test.
Add BS 3900 Method 1511.
 - Page 6.* Group C, Subgroup 1.
Delete the word "Omitted" and insert the following test:
Non-repetitive peak power, P_{RSM} , BS 9300 Method 1510. In "Specific Conditions" column add: " $P_{RSM} = 1\ 500\ W$, $t_{av} = 100\ \mu S$, $T_{amb} = 25\ ^\circ C$. A sinusoidal pulse with base width of $100\ \mu S$ may be used."
Delete Note 2.
In appropriate columns add Inspection Level S-3, AQL 4.0 %.
6. Published amendments (consolidated).
 - Page 2.* Packaging.
Add the following sentence:
"The pack shall contain the necessary nut and washer".
 - Page 3.* Group A. Subgroup 2, Avalanche voltage,
Under "Specific conditions" delete "Note 2"
and substitute " $I_R = 500\ \mu A$, (sinewave test)."
 - Page 7.* Delete Figure 2.

Military specification**CV7667-68****Semiconductor device, diode**

Description:— This specification covers the detail requirements for a Silicon Avalanche Rectifier Diode and is in accordance with K1007. Issue 3. except as otherwise stated.

Mechanical Dimensions and Outline:— K1007 Section B 10.3.3.2

Polarity:— CV7667 Stud is Anode
CV7668 Stud is Cathode

Absolute Maximum Ratings:—

Rating	V_{RWM}	V_{RRM}	V_{RDM}	I_O	I_{FS}	T_{stg}	shock	Vibration
Unit	V	V	V	A	A	°C	g	g
Min	—	—	—	—	—	– 55	—	—
Max	1 000	1 200	1 000	10.0	200	+ 150	1 500	20
Notes	A,E	F,J	G,J	B	C,H		D	

Notes: A from – 55 °C to + 150 °C
 B At 125 °C. See derating curve. Figure 1 Page 7.
 C See Surge rating curves.
 D Duration 0.5 ms.
 E V_{RWM} = Working Peak Reverse Voltage
 F V_{RRM} = Recurrent Peak Reverse Voltage
 G V_{RDM} = Max. Reverse d.c.
 H I_{FS} = Forward Transit (Surge) Current.
 J At 2 °C only

Primary Electrical Characteristics:—

Characteristics	V_{RA}	V_F	I	I_R
Unit	V	V	uA	uA
Min.	1 250		—	—
Max.	—	1.2	50	1 000
T °C	25	25	25	100
I_F A	—	10.0	—	—
V_R V	—	—	1 000	1 000
Note	K,L			

NOTE K. For Avalanche voltage test see Note 2. Page 6. and Figure 2. Page 7.
 L. V_{RA} = Avalanche Reverse Voltage

Reliability Assurance Requirements:— Under discussion.

Requirements:—

Marking: The device shall be marked as K1007 Section B. 1.3.4 as space permits, 1.3.4.1 a) and b) being the minimum requirements any remaining marking shall be on the packing.

Quality Assurance Prevision:—

Destructive Tests: The tests listed in Table 2, Group B Inspection, Sub Groups, 2, 3 and 4 and Table 3, Group C Inspection, Sub Group 2 are considered destructive.

Group C Inspection: This inspection shall be conducted on the initial lot, and thereafter every ninety days or every fifth lot, whichever occurs first.