

CONFIRMED
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Electronic parts of assessed quality —

Reverse blocking triode thyristors

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 13 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 CV7582-CV7584, Issue 2A dated 31 January 1968 with their existing amendments which are reproduced below are hereby adopted as BS 9300 C582-C584.**
2. Devices inspected, released and supplied to this specification shall be marked CV7582-CV7584 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 In the Groups A, B and C inspection tables the references in the "K1007/NATO Ref" column shall be superseded by the appropriate reference given in BS 9300 Appendix C (Table 1 to Table 5 inclusive).
5. Additional requirements not covered by BS 9300 Appendix C are:
 - Page 2.* NATO stock numbers.
Against each CV type number, delete "5960" and substitute "5961".
 - Page 10.* Figure 1. Derating curve.
On each of five curves, delete "C" and insert "conduction angle".
6. Published amendments (consolidated)
None

Military specification**CV7582-84****Semiconductor device, thyristor**

Description: This specification covers the detail requirements for a reverse blocking triode thyristor, and is in accordance with Specification K1007, Issue 3, except as otherwise stated.

Mechanical dimensions and outline: See Figure 5 Page 13

Connections Stud — Anode
Large tag — Cathode (No. 1 Terminal)
Small tag — Gate (No. 2 Terminal)

Absolute Maximum Ratings

Device	Ratings	V_{RWM}	V_{RRM}	V_{RSM}	V_R	V_{DM}	V_D	V_{FGM}	V_{RGM}	I_O	I_{FRM}
	Unit	V	V	V	V	V	V	V	V	A	A
CV7582	Min.	—	—	—	—	—	—	—	—	—	—
	Max.	100	100	150	100	100	100	10	5	3.0	18
CV7583	Min.	—	—	—	—	—	—	—	—	—	—
	Max.	200	200	300	200	200	200	10	5	3.0	18
CV7584	Min.	—	—	—	—	—	—	—	—	—	—
	Max.	400	400	500	400	400	400	10	5	3.0	18
Note		C	C	C	C	C	C	C	C	A.C.	C

Device	Ratings	I_{FSM}	I_F	I_{RRM}	I_{FGM}	P_{GAV}	P_G	T_{CASE}	T_{STG}	Shook	Vib.	Torque
	Unit	A	A	A	A	W	W	°C	°C	g	g	lb/ft.
CV7582	Min.	—	—	—	—	—	—	—	– 55	—	—	0.6
	Max.	50	4.0	5	2	0.5	5	125	125	1 500	20	1.3
CV7583	Min.	—	—	—	—	—	—	—	– 55	—	—	0.6
	Max.	50	4.0	5	2	0.5	5	125	125	1 500	20	1.3
CV7584	Min.	—	—	—	—	—	—	—	– 55	—	—	0.6
	Max.	50	4.0	5	2	0.5	5	125	125	1 500	20	1.3
Note		C	B.C.		C							

NOTES

- A $T_{stud} = 125\text{ °C}$
 B $T_{case} = 100\text{ °C}$
 C $R_{GK} = 1k\Omega$
 D See derating curve Figure 1 Page 10.
 E Commercial Equivalents 5RCA Series. BTY79 series
 CRS3 Series.

Primary Electrical Characteristics

Characteristics			V _F	i _D	i _R			V _{GT}	I _{GT}	V _{GD}	t _q	I _H	
Unit			V	mA	mA			V	mA	V	μS	mA	
Min.			—	—	—			—	—	—	—	—	
Max.			2.0	1.0	1.0			3.0	30	.25	25	50	
Conditions	T _{CASE}		°C	25	125	125			25	25	125	25	25
	I _F (Pulsed)		A	10	—	—		—	—	—	—	10	—
	I _g		mA	—	0	0			25	—	—	—	0
	V _R and V _F	CV7582	V	—	100	100			—	—	—	—	—
		CV7583	V	—	200	200			—	—	—	—	—
		CV7584	V	—	400	400			—	—	—	—	—
NOTES									F			G	

NOTES F See circuit in Figure 2.

G See circuit in Figure 3.

Reliability Assurance Requirements: Under discussion.Requirements

Marking: The device shall be marked first with the CV number and then according to K1007, Section **B.1.3.4** a), c), d) and f) as space permits. Any other marking shall be on the pack.

Quantity Assurance Provisions

Destructive Tests The tests listed in 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.

Packaging The devices shall be packed according to k1007, Section A, 1.2 c).

NATO Stock Numbers

CV7582 = 5960-99-037-3858

CV7583 = 5960-99-037-3859

CV7584 = 5960-99-037-3860

This specification has been prepared by, and the Qualification Approval Authority is:—
Ministry of Technology, Royal Radar Establishment, Malvern, Worcestershire.