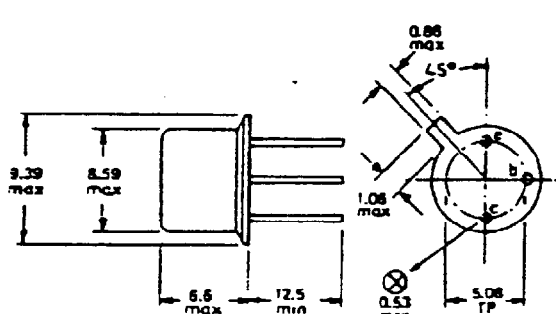


This Specification contains a small amount of data which may not be legible. It has been acquired directly from the manufacturer or standards organization and Technical Indexes/IHS have not been able to obtain a better copy.

If the quality of this Specification is not fit for your intended purpose, please contact the relevant manufacturer or standards organization to clarify the details you require.

Address of responsible ONH: Netherlands Electrotechnical Committee Kalfjeslaan 2 NL-2623 AA DELFT - The Netherlands		NL-CECC 50 004-168 CECC 50 004-168 Issue 1, September 1989	
Specification available from: Corporate Center Philips Components Postbox 218 NL-5600 MD EINDHOVEN - The Netherlands		Page 1 of 15 pages	
ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH CECC 50 000		MANUFACTURER'S TYPE NUMBER CV7725 CV7726 CV7727	
Outline and dimensions Third angle projection For detail dimensions see IEC 191-84C and C4 Equivalent to SO-134A JEDEC TO-39		For ordering information see Clause 7 Description: Semiconductor material: Silicon Encapsulation: Metal Application: Switching Polarity: N-P-N Power: (Ambient rated). 800mW	
		ASSESSMENT LEVEL F PLUS ADDITIONAL TESTS	
Marking information see clause 5		All dimensions in millimetres	

4. LIMITING VALUES (Absolute maximum system)
 (Over the operating temperature range unless otherwise stated)

Clause CECC 50 004		Symbol	Value		Unit
			min	max	
4.1.	Operating ambient temperature	T_{amb}	-65	200	°C
4.2.	Storage temperature	T_{stg}	-65	200	°C
4.3.	Collector-base continuous (direct) voltage	V_{CBO}		80 60 40	V V V
4.4.	Collector-emitter continuous (direct) voltage	V_{CEO}		35 30 20	V V V

Cont/d.....

Refer to Qualified Products List CECC 00 200 for details of manufacturers approved to this specification

NL-CECC 50 004-168
Issue 1, September 1989

4. LIMITING VALUES (Cont/d)

Clause CECC 50 004	Symbol	Value		Unit
		min	max	
4.5. Emitter-base continuous (direct) voltage	V_{EBO}		6.0	V
4.6. Continuous (direct) collector current	I_C		1.0	A
Peak repetitive collector current	I_{CM}		1.0	A
Continuous (direct) base current	I_B		0.1	A
4.7. Power dissipation at $T_{amb} \leq 25^\circ\text{C}^*$	P_{tot}		800	mW
Power dissipation at $T_{case} \leq 25^\circ\text{C}^*$	P_{tot}		3.0	W

(*See derating curves figs 1 and 2)

5. ELECTRICAL CHARACTERISTICS (Cont/d)

Clause CECC 50 004	Measured	Characteristics and conditions at $T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated	Symbol	Value		Unit
				min	max	
	+	Collector-emitter sustaining voltage $I_B = 0$ $I_C = 30\text{mA}$	$V_{CE0sust}$	35	-	V
		CV7725		30	-	V
		CV7726		20	-	V
	+	Collector-base breakdown voltage $I_E = 0$ $I_C = 0.1\text{mA}$	$V_{(BR)CBO}$	80	-	V
		CV7725		60	-	V
		CV7726		40	-	V
	+	Emitter-base breakdown voltage $I_C = 0$ $I_E = 0.1\text{mA}$	$V_{(BR)EBO}$	6	-	V
		All				
5.7.1	+	Rise time $I_C = 150\text{mA}$ $I_B = 15\text{mA}$	t_r	-	75	ns
	+	Storage time	t_s	-	860	ns
		$I_C = 150\text{mA}$ $I_{B1} = I_{B2} = 15\text{mA}$				
5.7.2	+	Fall time	t_f	-	100	ns
	+	Transition frequency $I_C = 50\text{mA}$ $V_{CE} = 6\text{V}$ $F = 35\text{MHz}$	f_T	60	-	MHz
		CV7725 CV7726, CV7727		50	-	MHz
5.8	+	Output capacitance $I_E = 0$ $V_{CB} = 10\text{V}$ $f = 1\text{MHz}$	C_{22b}	-	12	pF
5.9		Thermal resistance junction to ambient	$R_{th(j-amb)}$	-	218	$^{\circ}\text{C/W}$