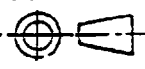
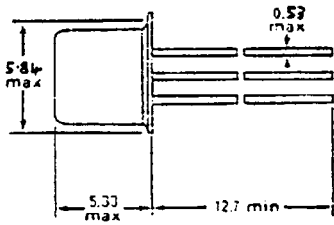
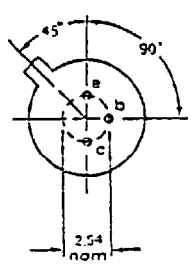


This Specification contains a small amount of data which may not be legible. It has been acquired directly from the manufacturer or standards organization and Technical Indexes/IHS have not been able to obtain a better copy.

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.

BRITISH STANDARDS INSTITUTION 2, PARK STREET, LONDON, W1A 2BS	BS CECC 50 002-075
Specification available from:- AS SHOWN IN PD 9002 CECC 00200, AND TEXAS INSTRUMENTS LIMITED, MANTON LANE, BEDFORD. TELEPHONE : 67466 TELEX : 82178	ISSUE 1 FEBRUARY 1978  Page 1 of 13 pages
ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH BS CECC 50000 : 1977	MANUFACTURER'S TYPE NUMBER BC 325 BC 326 SEE PD 9002 AND CECC 00200
<u>Outline and dimensions</u> Third angle projection For detail dimensions see BS 3934 S0132A  Similar to:- IEC C7/B11   The collector is electrically connected to the envelope Dimensions in millimetres.	For ordering information see page 3 AMBIENT RATED BIPOLAR TRANSISTORS FOR LOW FREQUENCY LOW LEVEL, LOW NOISE AMPLIFICATION PNP EPITAXIAL SILICON PLANAR TRANSISTOR IN METAL CAN, GLASS-METAL SEALED
Marking information see page 3.	ASSESSMENT LEVEL F PLUS ADDITIONAL TESTS

1. LIMITING VALUES (absolute maximum ratings)

T_{amb}	Operating ambient temperature range	-55 °C to 200 °C
T_{stg}	Storage temperature range	-55 °C to 200 °C
V_{CBO}	Collector-base voltage $I_E = 0$	60 V
V_{CEO}	Collector-emitter voltage $I_B = 0$	60 V
V_{EBO}	Emitter-base voltage $I_C = 0$	6 V
I_C	Continuous collector current	50 mA
P_{tot}	Total power dissipation	360 mW
	$T_{amb} = 25 °C$ max (see Fig.1)	

Refer to Qualified Products List PD 9002 and/or CECC 00200 for details of manufacturers approved to this specification

2. CHARACTERISTICS

$T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated.

$h_{21E}(1)$	Static forward current transfer ratio				
	$V_{CE} = -5\text{ V}, I_C = -10\text{ }\mu\text{A}$	BC 325	40	min	120
		BC 326	100	min	500
f_T	Transition frequency		60	MHz	min
	$V_{CE} = -5\text{ V}, I_C = -500\text{ }\mu\text{A}, f = 30\text{ MHz}$				
$I_{CBO}(1)$	Collector base leakage current		10	nA	max
	$I_E = 0$				
	$V_{CB} = -45\text{ V}$				
$I_{CBO}(2)$	Collector base leakage current		10	μA	max
	$I_E = 0$				
	$T_{amb} = 150^{\circ}\text{C}$				
	$V_{CB} = -45\text{ V}$				
I_{EBO}	Emitter-base leakage current		10	nA	max
	$I_C = 0$				
	$V_{EB} = -5\text{ V}$				
V_{BE}	Base-emitter voltage		0.5	V	min
	$V_{CE} = -5\text{ V}, I_C = -100\text{ }\mu\text{A}$		0.7	V	max
	Pulsed Test				
$h_{21E}(2)$	Static forward current transfer ratio				
	$V_{CE} = -5\text{ V}, I_C = -1\text{ }\mu\text{A}$	BC 326 only	30		min
F	Noise factor	BC 325	4	dB	max
		BC 326	3	dB	max
	$V_{CE} = -5\text{ V}, I_C = -10\text{ }\mu\text{A}$				
	$R_g = 10\text{ k}\Omega, f = 1\text{ kHz}, \text{Bandwidth} = 200\text{ Hz}$				
C_{22b}	Common base output capacitance		9	pF	max
	$V_{CB} = -5\text{ V}, I_E = 0, f = 1\text{ MHz}$				

V_{CEsat} Collector-emitter saturation voltage 0.35 V max

$I_C = -1$ mA, $I_B = -100$ μ A

Pulsed Test

h_{21e} Small signal forward current transfer ratio

$V_{CE} = -5$ V, $I_C = -50$ μ A, $f = 50$ MHz BC 325 1.6 min
BC 326 2.0 min

3. MARKING

3.1 Each transistor shall bear the following markings:-

- The manufacturers type number, e.g. BC 325
- The date code
- The manufacturers trade mark or the factory identification code.

3.2 Each package containing one or more of these transistors shall bear all the above markings and, in addition, this detail specification number, BS CECC 50 002-075 Issue 1.

4. RELATED DOCUMENTS

BS 2011/ IEC 68	'Methods for the environmental testing of electronic components and electronic equipment'.
BS 3934/ IEC 191	'Dimensions of semiconductor devices'.
BS E9000	'General requirements for electronic components of assessed quality'.
PD 9002	'BS 9000 component selection guide'.
BS CECC 50 000	'Harmonized generic specification for discrete semiconductor devices of assessed quality'.
BS E9007/ CECC 00,007	'Sampling plans and procedures for inspection by attributes'.
IEC 147-2	'General principles of measuring methods'.

5. ORDERING INFORMATION

Orders for these transistors should contain the following minimum information:-

- The device type number and this detail specification number, e.g. BC 325 to BS CECC 50 002-075 Issue 1.
- The quantity required.

D = Destructive ND = Non-destructive								
GROUP A Lot by Lot								
EXAMINATION OR TEST	D ND	BS CECC 50000 REF	CONDITIONS at $T_{amb} = 25^{\circ}C$ unless otherwise stated	Inspection Requirements				
				LIMITS			LEVEL OF ASSMT F	
				Min.	Max.	Units	IL	AQL
<u>SUBGROUP A1</u>							I	1.5%
Visual inspection	ND	4.2.1						
<u>SUBGROUP A2</u>							II	0.65%
Collector base leakage current I_{CBO}	ND	4.3.4 T-009	$V_{CB} = -45 V$ $I_E = 0$	-	10	nA		
Static forward current transfer ratio $h_{2IE(1)}$	ND	4.3.4 T-006	$V_{CE} = -5 V$ BC 325 $I_C = -10 \mu A$ BC 326	40 100	120 500			
<u>SUBGROUP A3</u>							I	2.5%
Emitter-base leakage current I_{EBO}	ND	4.3.4 T-002	$V_{EB} = -5 V$ $I_C = 0$	-	10	nA		
Small signal forward current transfer ratio h_{2Ie}	ND	4.3.4 T-021	$V_{CE} = -5 V$ BC 325 $I_C = -50 \mu A$ BC 326 $f = 50 MHz$	1.6 2.0	- -	- -		