



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO.,LTD

## TO-92 Plastic-Encapsulate Transistors

### A94 TRANSISTOR ( PNP )

#### FEATURES

Power dissipation

$P_{CM}$ : 0.625 W (  $T_{amb}=25$  )

Collector current

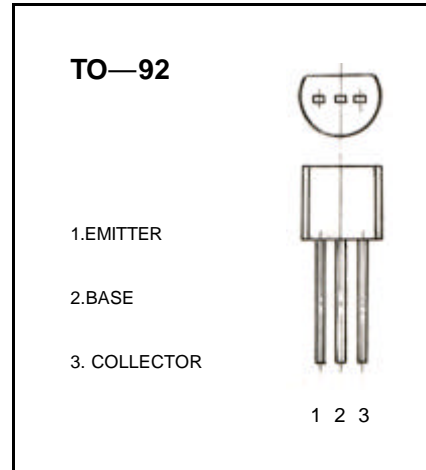
$I_{CM}$ : -0.2 A

Collector-base voltage

$V_{(BR)CBO}$ : -400 V

Operating and storage junction temperature range

$T_J$ ,  $T_{stg}$ : -55 to +150



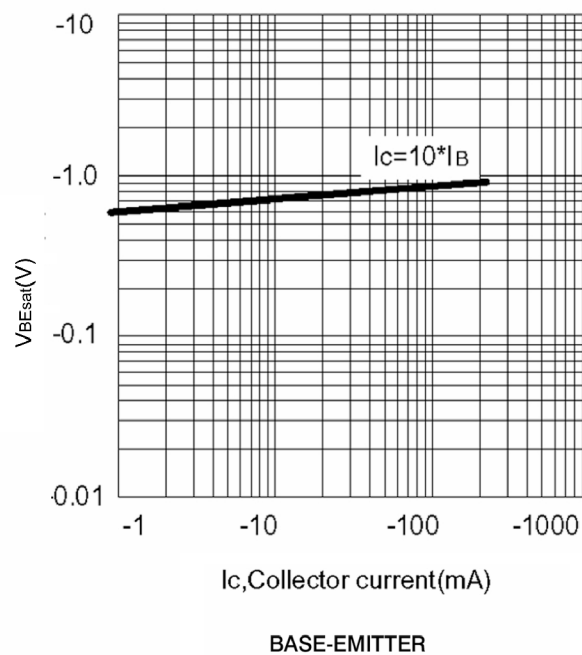
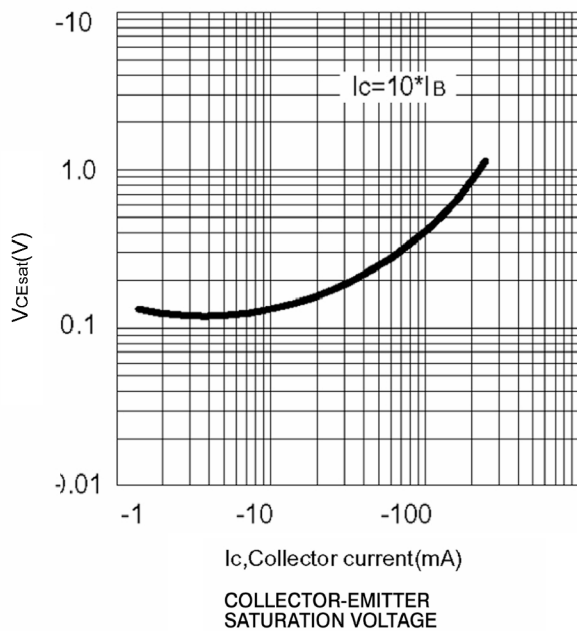
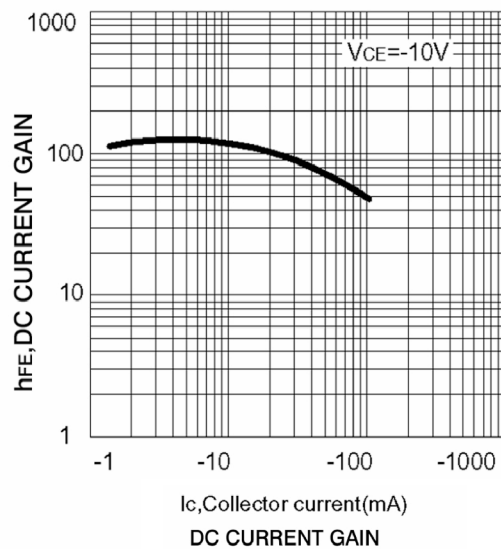
#### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25$

unless otherwise specified )

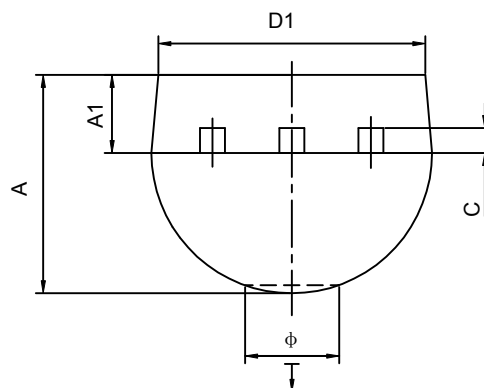
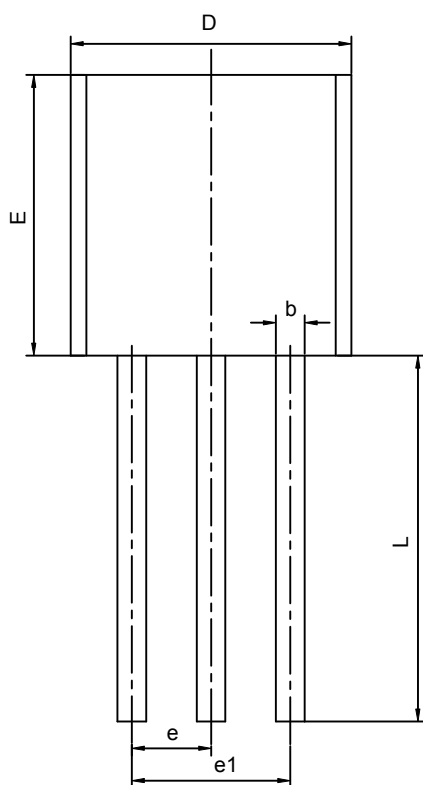
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A$ , $I_E = 0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 mA$ , $I_B = 0$	-400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A$ , $I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -400 V$ , $I_E = 0$			-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -400 V$ , $I_B = 0$			-5	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4 V$ , $I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -10V$ , $I_C = -10 mA$	80		300	
	$h_{FE(2)}$	$V_{CE} = -10V$ , $I_C = -1mA$	70			
	$h_{FE(3)}$	$V_{CE} = -10V$ , $I_C = -100 mA$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 mA$ , $I_B = -1mA$			-0.2	V
	$V_{CE(sat)}$	$I_C = -50 mA$ , $I_B = -5mA$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10 mA$ , $I_B = -1 mA$			-0.75	V
Transition frequency	$f_T$	$V_{CE} = -20V$ , $I_C = -10mA$ $f = 30MHz$	50			MHz

## Typical Characteristics

A94



## TO-92 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
<b>A</b>	3.300	3.700	0.130	0.146
<b>A1</b>	1.100	1.400	0.043	0.055
<b>b</b>	0.380	0.550	0.015	0.022
<b>c</b>	0.360	0.510	0.014	0.020
<b>D</b>	4.400	4.700	0.173	0.185
<b>D1</b>	3.430		0.135	
<b>E</b>	4.300	4.700	0.169	0.185
<b>e</b>	1.270TYP		0.050TYP	
<b>e1</b>	2.440	2.640	0.096	0.104
<b>L</b>	14.100	14.500	0.555	0.571
<b>Ö</b>		1.600		0.063
$\downarrow$	0.000	0.380	0.000	0.015