



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

## TO-92 Plastic-Encapsulate Transistors

## A92 TRANSISTOR ( PNP )

## FEATURES

Power dissipation

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

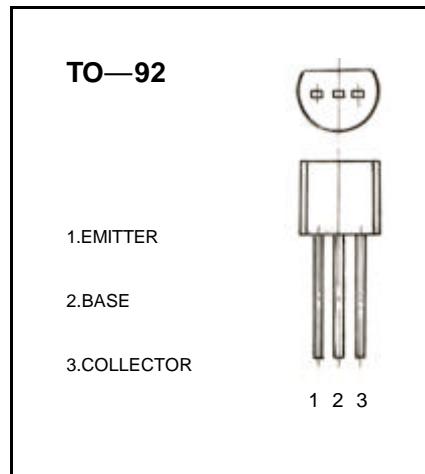
Collector current

 $I_{CM}$ : -0.5 A

Collector-base voltage

 $V_{(BR)CBO}$  : -300V

Operating and storage junction temperature range

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

## ELECTRICAL CHARACTERISTICS ( Tamb=25 unless otherwise specified )

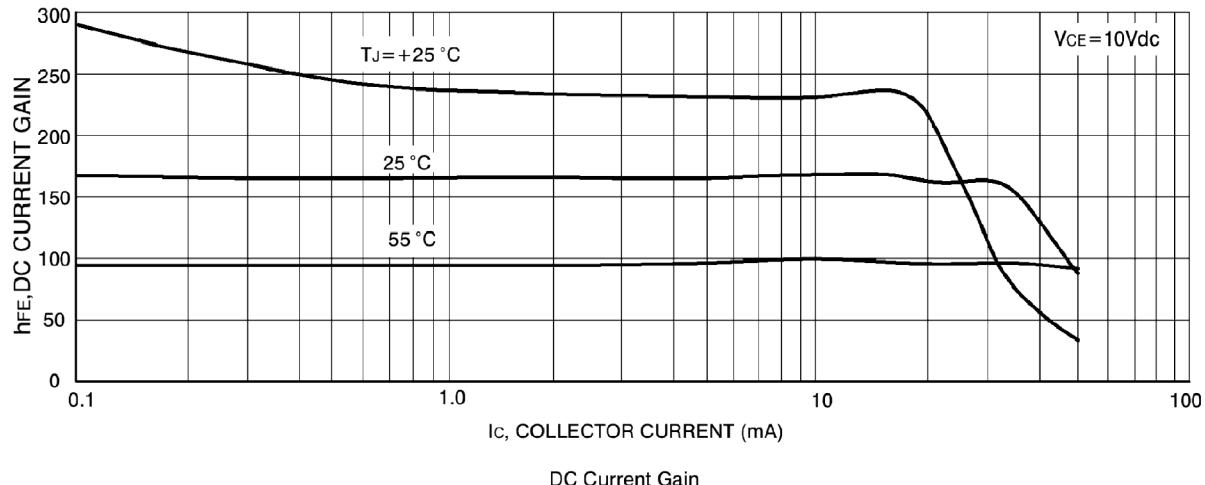
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C = -100 \mu A, I_E = 0$	-300			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C = -1 mA, I_B = 0$	-300			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E = -100 \mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -200 V, I_E = 0$			-0.25	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -10 V, I_C = -1 mA$	60			
	$h_{FE(2)}$	$V_{CE} = -10 V, I_C = -10 mA$	80		250	
	$h_{FE(3)}$	$V_{CE} = -10 V, I_C = -80 mA$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20 mA, I_B = -2 mA$			-0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20 mA, I_B = -2 mA$			-0.9	V
Transition frequency	$f_T$	$V_{CE} = -20 V, I_C = -10 mA$ $f = 30 MHz$	50			MHz

CLASSIFICATION OF  $h_{FE(2)}$ 

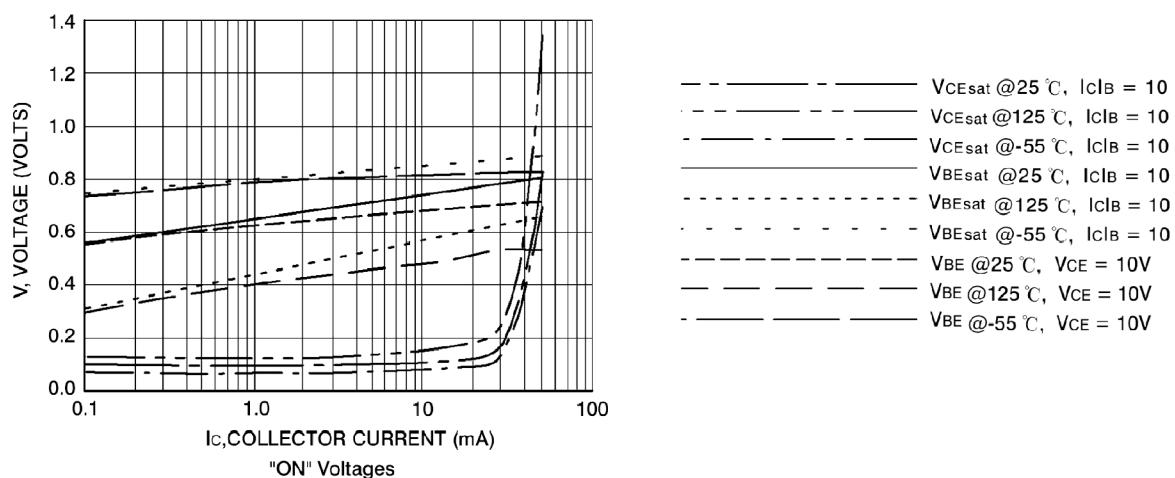
Rank	A	B <sub>1</sub>	B <sub>2</sub>	C
Range	80-100	100-150	150-200	200-250

## Typical Characteristics

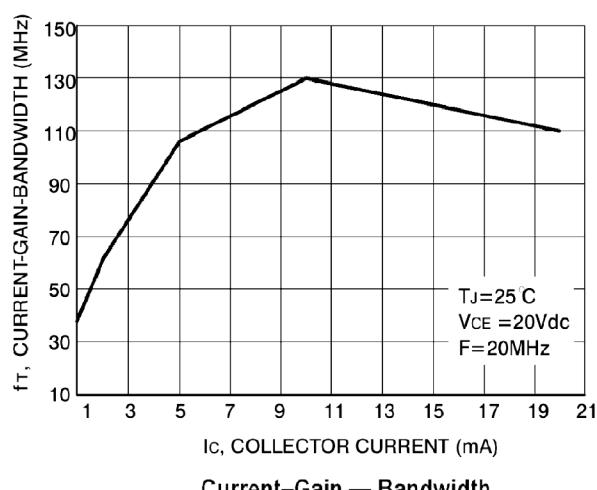
A92



DC Current Gain

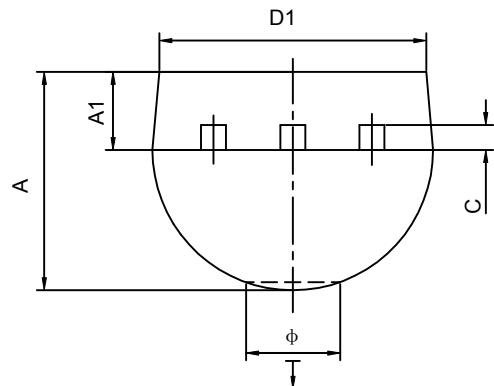
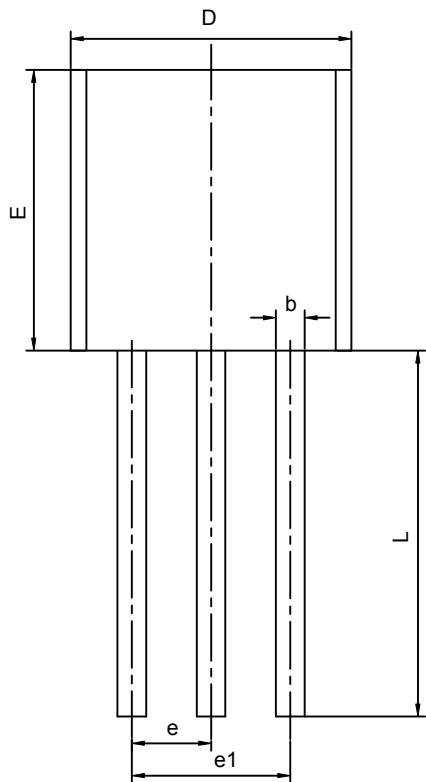


"ON" Voltages



Current-Gain — Bandwidth

## 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
<b>↓</b>	0.000	0.380	0.000	0.015