



东莞市华远电子有限公司

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## TO-92 Plastic-Encapsulate Transistors

**2SA950**

TRANSISTOR ( PNP )

### FEATURE

Power dissipation

$P_{CM} : 0.6 \text{ W (Tamb=25 )}$

Collector current

$I_{CM} : -0.8 \text{ A}$

Collector-base voltage

$V_{(BR)CBO} : -35 \text{ V}$

Operating and storage junction temperature range

$T_j, T_{stg} : -55 \text{ to } +150$

TO—92

1.EMITTER

2. COLLECTOR

3. BASE



1 2 3

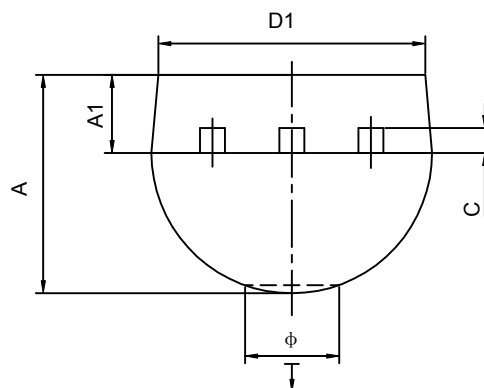
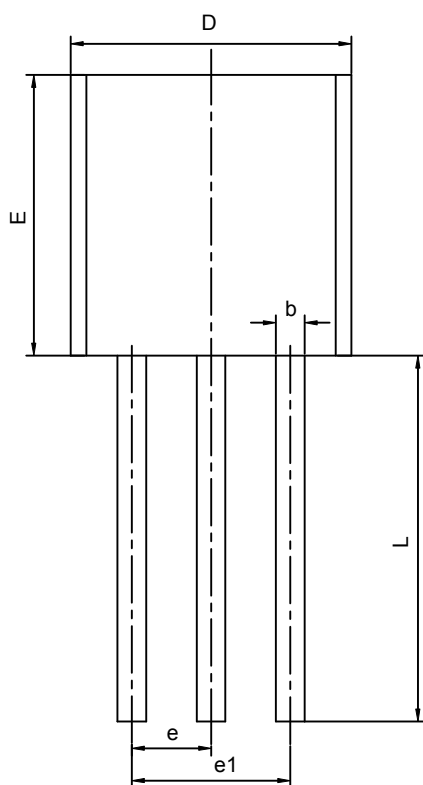
### ELECTRICAL CHARACTERISTICS ( Tamb=25 unless otherwise specified )

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1 \text{ mA}, I_E = 0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10 \text{ mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1 \text{ mA}, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -35 \text{ V}, I_E = 0$			-0.1	$\mu \text{ A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	$\mu \text{ A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = -1 \text{ V}, I_C = -100 \text{ mA}$	100		320	
	$h_{FE(2)}$	$V_{CE} = -1 \text{ V}, I_C = -700 \text{ mA}$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}, I_B = -20 \text{ mA}$			-0.7	V
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10 \text{ V}, I_E = 0$ $f = 1 \text{ MHz}$		19		pF
Transition frequency	$f_T$	$V_{CE} = -5 \text{ V}, I_C = -10 \text{ mA}$		120		MHz

### CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

## 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