



## TO-92 Plastic-Encapsulate Transistors

### MPSA94 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$$P_{CM}: 0.625 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

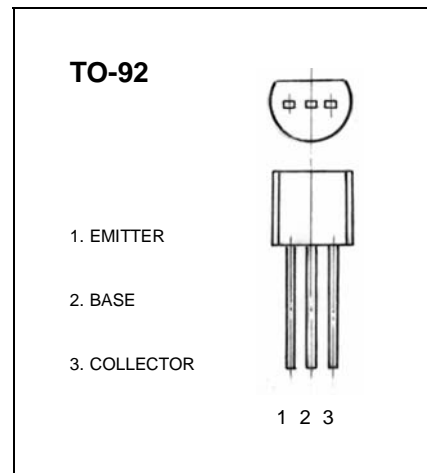
$$I_{CM}: -0.2 \text{ A}$$

Collector-base voltage

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

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$

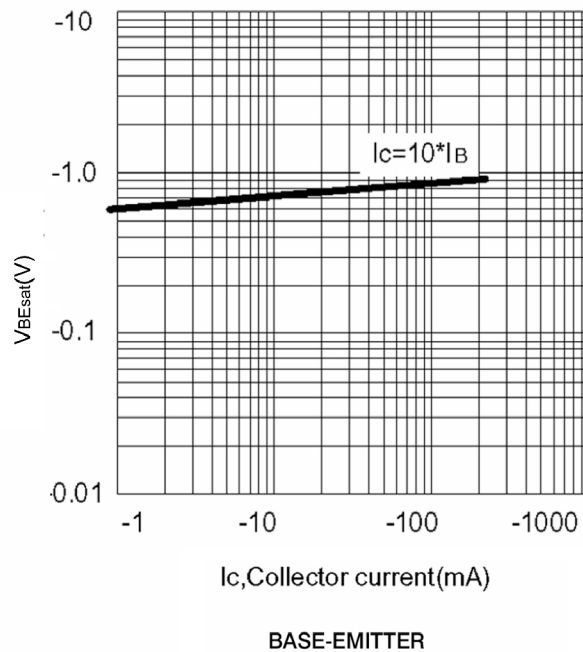
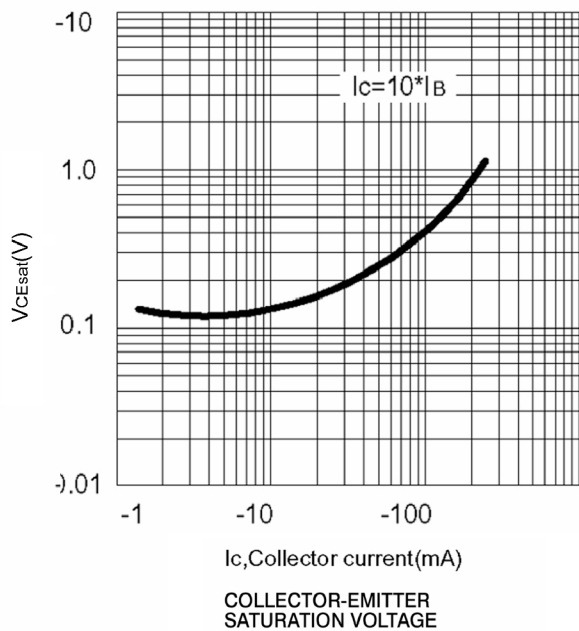
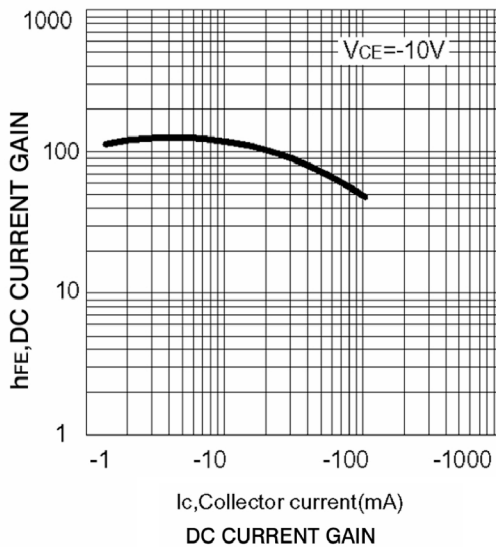


#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

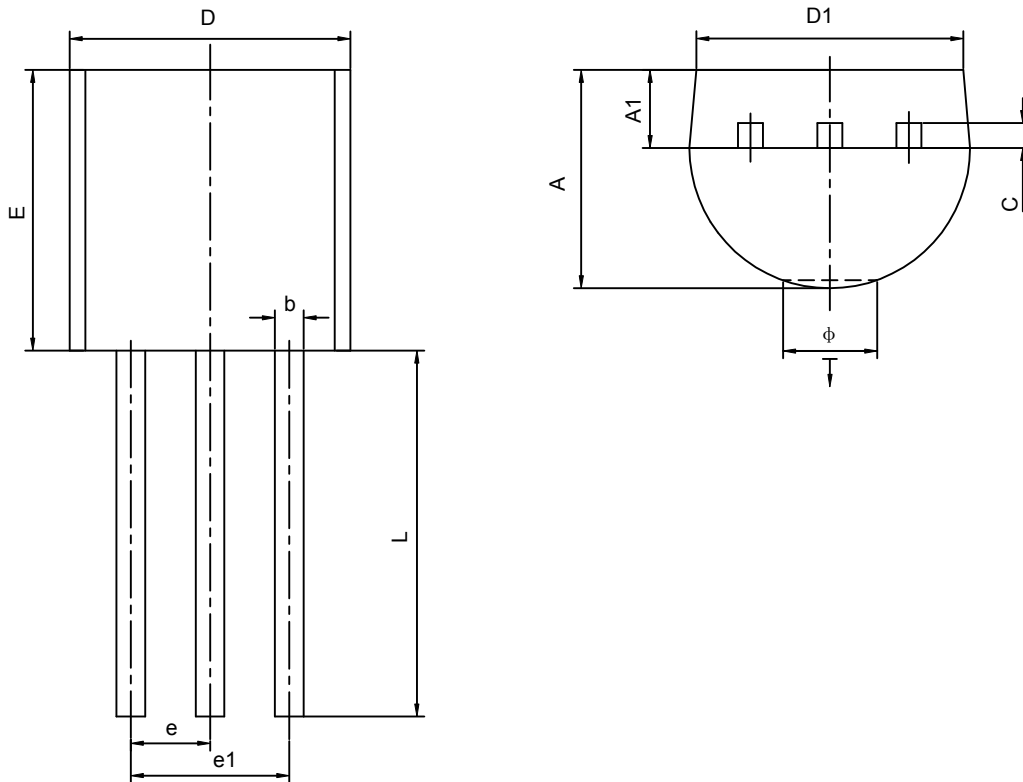
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C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

# Typical Characteristics

MPSA94



## TO-92 PACKAGE OUTLINE DIMENSIONS



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