

GMPSA94**PNP EPITAXIAL PLANAR TRANSISTOR****Description**

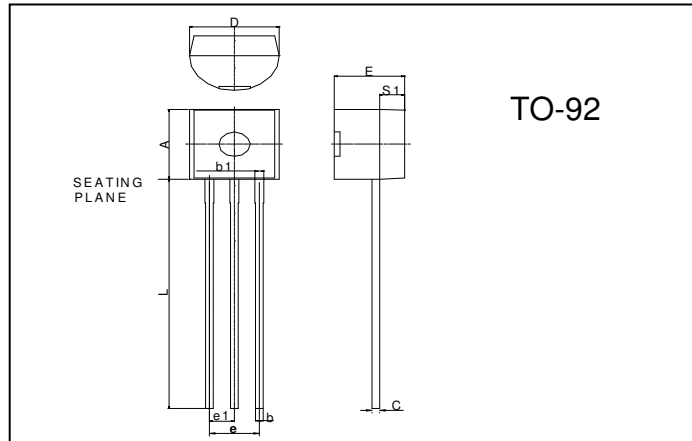
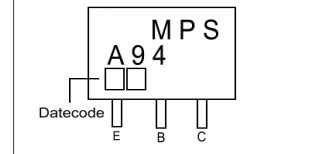
The GMPSA94 is designed for application that requires high voltage.

Features

*High Breakdown Voltage:-400(Min) at $I_C=-1\text{mA}$

*High current .Gain : $I_C=-300\text{mA}$ at 25°C

*Complementary to GMPSA44

Package Dimensions**Marking:**

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$, unless otherwise specified)

Parameter		Ratings	Unit
Collector to Base Voltage	V_{CBO}	-400	V
Collector to Emitter Voltage	V_{CEO}	-400	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collect Current(DC)	I_C	-300	mA
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$
Total Power Dissipation	P_D	625	mW

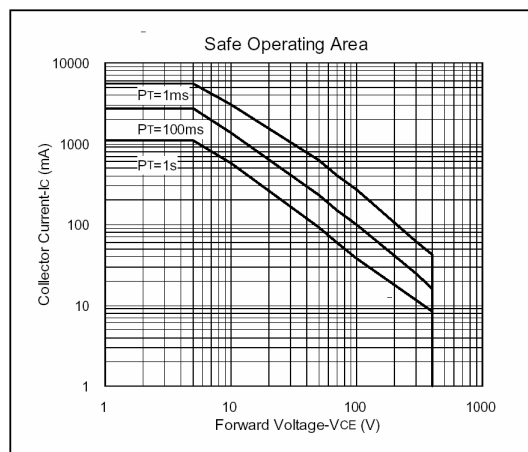
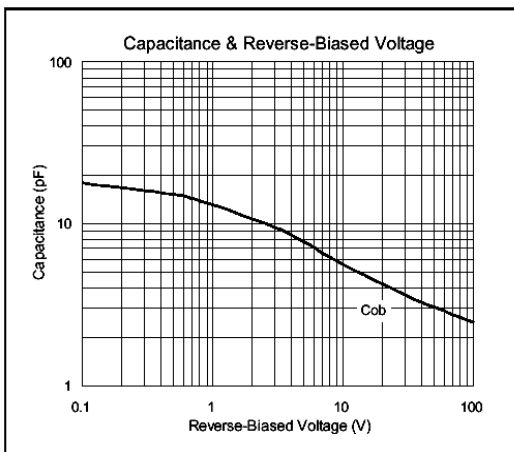
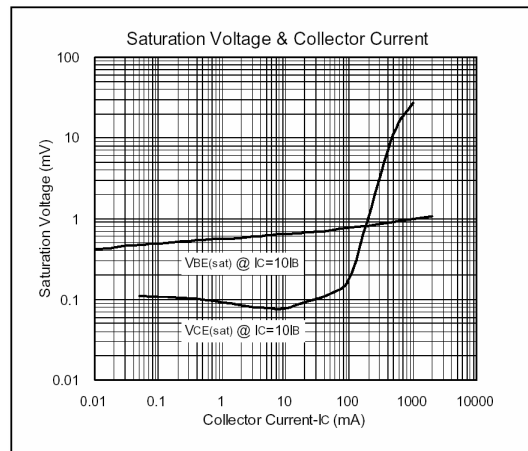
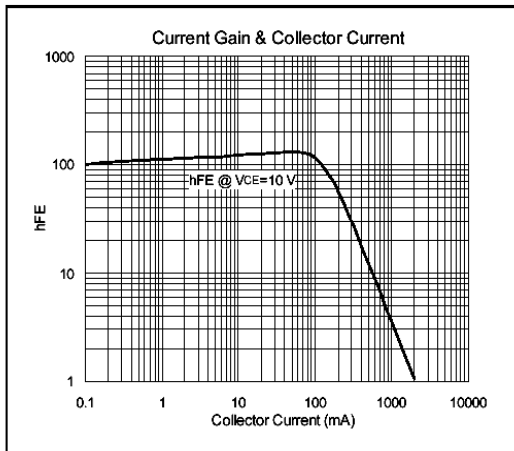
Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise specified)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVC_{BO}	-400	-	-	V	$I_C=-100\mu\text{A}, I_E=0$
BV_{CEO}	-400	-	-	V	$I_C=-1\text{mA}, I_B=0$
BVE_{BO}	-6	-	-	V	$I_E=-10\mu\text{A}, I_C=0$
IC_{BO}	-	-	-100	nA	$V_{CB}=-400\text{V}, I_E=0$
IE_{BO}	-	-	-100	nA	$V_{EB}=-4\text{V}, I_C=0$
$ICES$	-	-	-500	nA	$V_{CE}=-400\text{V}, V_{BE}=0$
$V_{CE(sat)1}$	-	-	-350	mV	$I_C=-1.0\text{mA}, I_B=-0.1\text{mA}$
$V_{CE(sat)2}$	-	-	-500	mV	$I_C=-10\text{mA}, I_B=-1\text{mA}$
$V_{CE(sat)3}$	-	-	-750	mV	$I_C=-50\text{mA}, I_B=-5\text{mA}$
$V_{BE(sat)}$	-	-	-750	mV	$I_C=-10\text{mA}, I_B=-1\text{mA}$
$hFE1$	40	-	-		$V_{CE}=-10\text{V}, I_C=-1\text{mA}$
$hFE2$	50	-	300		$V_{CE}=-10\text{V}, I_C=-10\text{mA}$
$hFE3$	45	-	-		$V_{CE}=-10\text{V}, I_C=-50\text{mA}$
$hFE4$	40	-	-		$V_{CE}=-10\text{V}, I_C=-100\text{mA}$

Classification of hFE2

Rank	N	NS	SD	SUM
Range	50-300	70-300	70-210	120-300
$V_{CE(sat)2}: I_C=-10\text{mA}, I_B=-1\text{mA}$	-	-	<200mV	-
$hFE: V_{CE}=3\text{V}, I_C=100\text{mA}$	-	>50	-	-

Characteristics Curve



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