

**GMPSA94S****PNP EPITAXIAL PLANAR TRANSISTOR****Description**

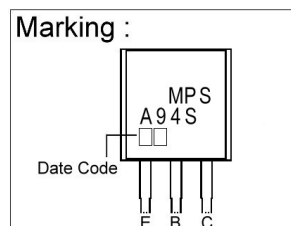
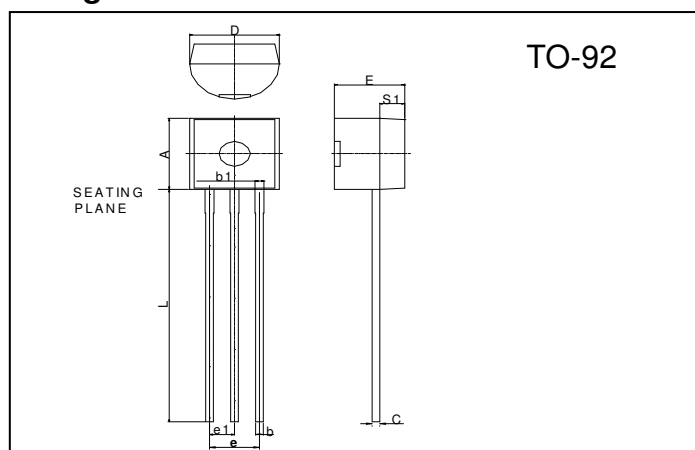
The GMPSA94S is designed for application that requires high voltage.

**Features**

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

\*High current Gain:  $I_C=-300mA$  at  $25^{\circ}C$

\*Complementary to GMPSA44S

**Package Dimensions**

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

Parameter	Symbol	Rated	Unit
Collector to Base Voltage	$V_{CB0}$	-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	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^{\circ}C$
Total Power Dissipation	$P_D$	625	mW

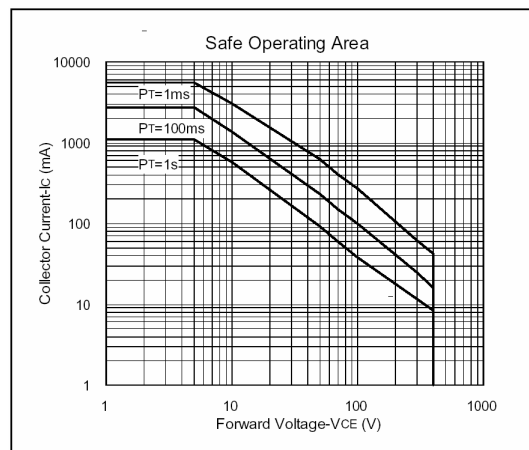
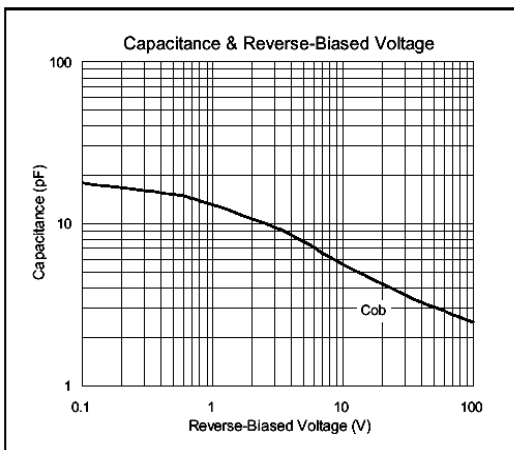
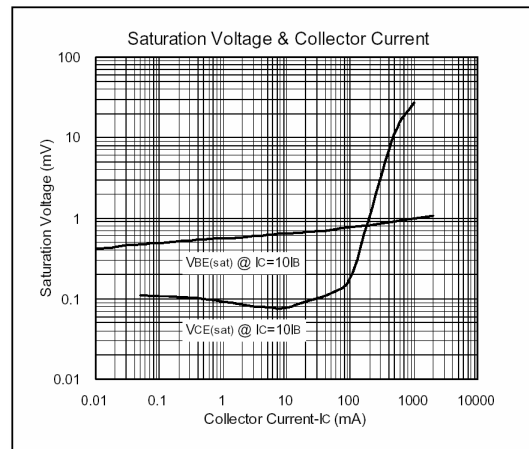
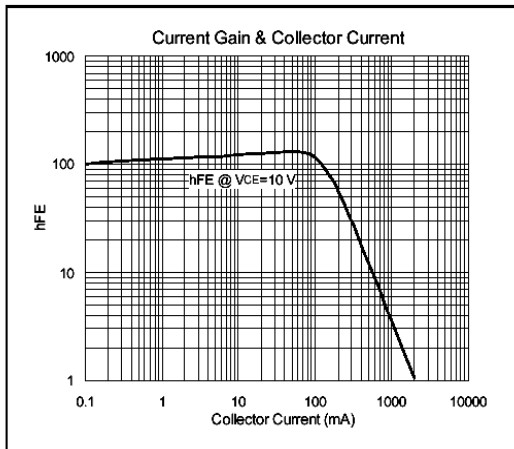
**Electrical Characteristics** ( $T_a = 25^{\circ}C$ , unless otherwise specified)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
$V_{V_{CB0}}$	-400	-	-	V	$I_C=-100\mu A, I_E=0$
$V_{V_{CEO}}$	-400	-	-	V	$I_C=-1mA, I_B=0$
$V_{V_{EBO}}$	-6	-	-	V	$I_E=-10\mu A, I_C=0$
$I_{I_{CBO}}$	-	-	-100	nA	$V_{CB}=-400V, I_E=0$
$I_{I_{EBO}}$	-	-	-100	nA	$V_{EB}=-4V, I_C=0$
$I_{I_{CES}}$	-	-	-500	nA	$V_{CE}=-400V, V_{BE}=0$
$V_{V_{CE(sat)1}}$	-	-	-350	mV	$I_C=-1mA, I_B=-0.1mA$
$V_{V_{CE(sat)2}}$	-	-	-500	mV	$I_C=-10mA, I_B=-1mA$
$V_{V_{CE(sat)3}}$	-	-	-750	mV	$I_C=-50mA, I_B=-5mA$
$V_{V_{BE(sat)}}$	-	-	-750	mV	$I_C=-10mA, I_B=-1mA$
$h_{h_{FE1}}$	40	-	-		$V_{CE}=-10V, I_C=-1mA$
$h_{h_{FE2}}$	50	-	300		$V_{CE}=-10V, I_C=-10mA$
$h_{h_{FE3}}$	45	-	-		$V_{CE}=-10V, I_C=-50mA$
$h_{h_{FE4}}$	20	-	-		$V_{CE}=-10V, I_C=-100mA$

**Classification of hFE2**

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

## Characteristics Curve



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