

## GMPSA42

## NPN EPITAXIAL PLANAR TRANSISTOR

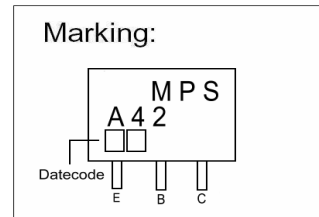
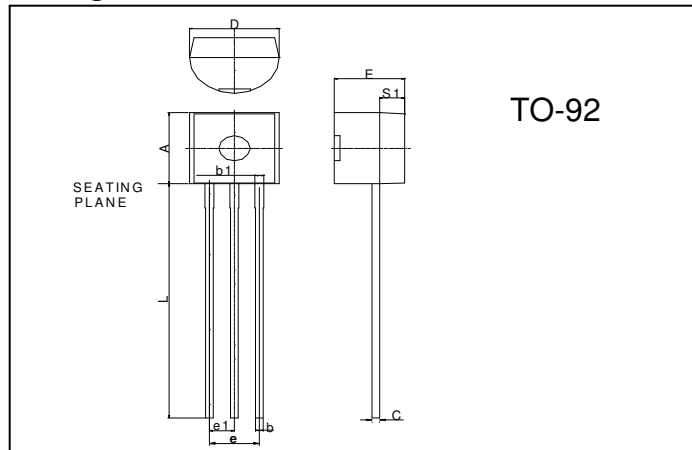
### Description

The GMPSA42 is designed for application that requires high voltage.

### Features

- \*High Collect-Emmitter Breakdown Voltage
- \*Low Collect-Emmitter Saturation Voltage
- \*Complementary to GMPSA92

### 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 (Ta = 25°C, unless otherwise specified)

Parameter		Ratings	Unit
Collector to Base Voltage	VCBO	300	V
Collector to Emmitter Voltage	VCEO	300	V
Emmitter to Base Voltage	VEBO	6	V
Collect Current(DC)	Ic	500	mA
Junction Temperature	Tj	+150	°C
Storage Temperature Range	TSTG	-55 ~ +150	°C
Total Power Dissipation	PD	625	mW

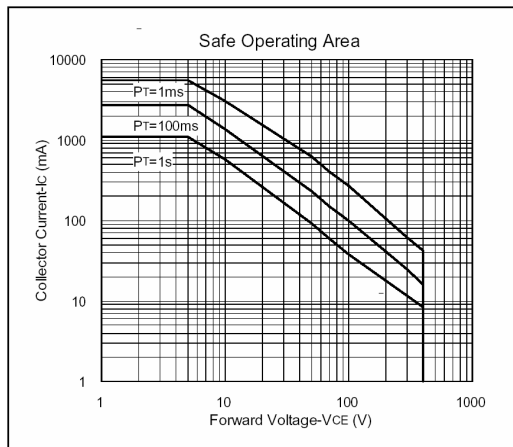
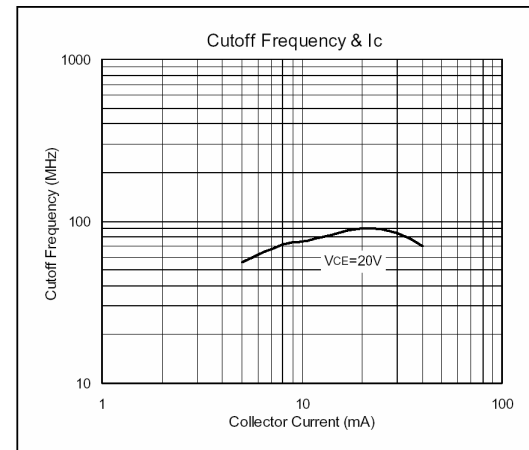
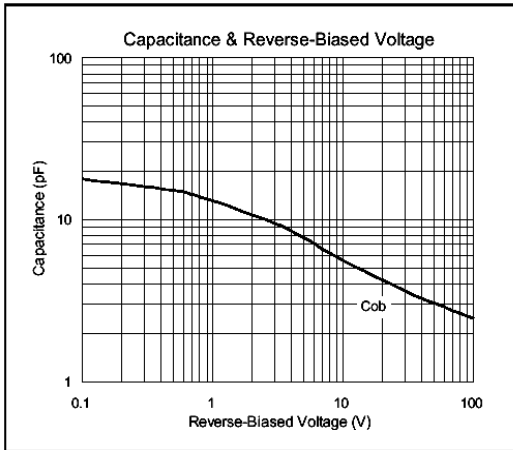
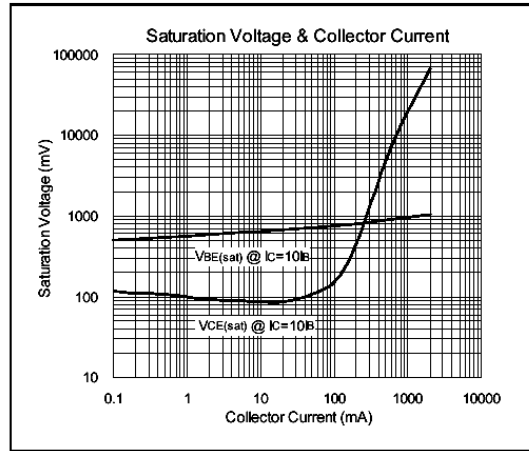
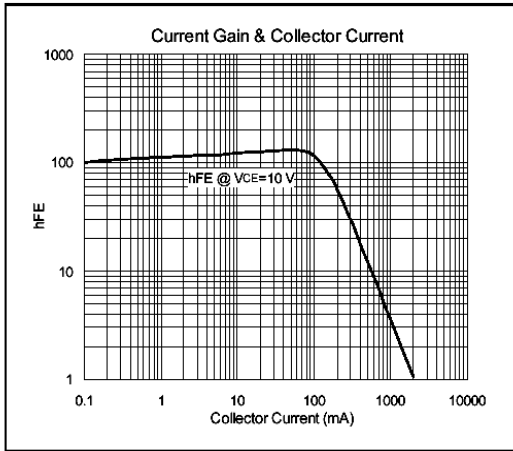
### Electrical Characteristics (Ta = 25°C, unless otherwise specified)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	300	-	-	V	IC=100uA
BVCEO	300	-	-	V	IC=1mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	100	nA	VCB=260V
IEBO	-	-	100	nA	VEB=6V
VCE(sat)	-	-	350	mV	IC=20mA, IB=2mA
VBE(sat)	-	-	900	mV	IC=20mA, IB=2mA
hFE1	25	-	-		VCE=10V, IC=1mA
hFE2	40	-	-		VCE=10V, IC=10mA
hFE3	40	-	-		VCE=10V, IC=30mA
fT	50	-	-	MHz	VCB=20V, IC=10mA, f=100MHz
Cob	-	-	3	pF	VCB=20V, f=1MHz, IE=0

### Classification of Rank

Rank	hFE1	hFE2	hFE3	VCE(sat)
NS	>80	>120	>120	<200mV
N	>25	>40	>40	<350mV

## Characteristics Curve



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**Head Office And Factory:**

- **Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
- TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- **China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
- TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165