

## GMBT3906

### PNP EPITAXIAL PLANAR TRANSISTOR

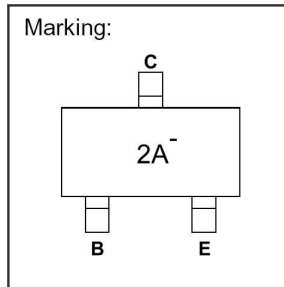
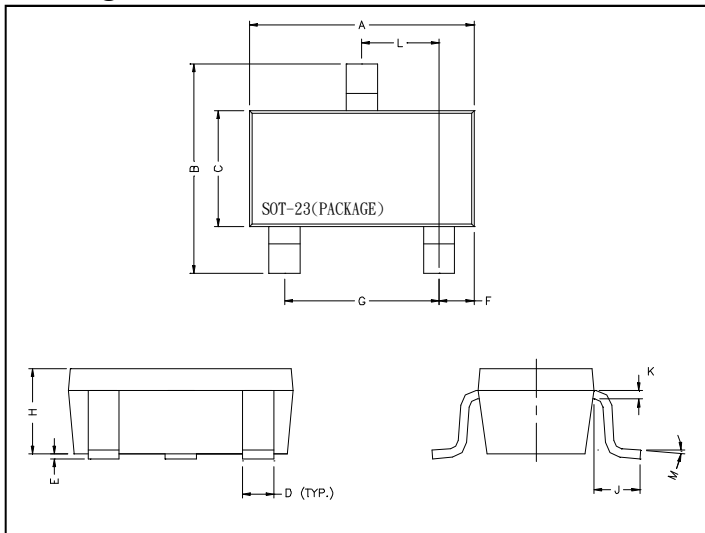
#### Description

The GSBMT3906 is designed for general purpose switching and amplifier applications.

#### Features

- \*Pb-free package are available
- \*Collector-emitter voltage -40V
- \*Complementary to GMBT3904

#### Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	1.90	REF.
B	2.40	2.80	H	1.00	1.30
C	1.40	1.60	K	0.10	0.20
D	0.35	0.50	J	0.40	-
E	0	0.10	L	0.85	1.15
F	0.45	0.55	M	0°	10°

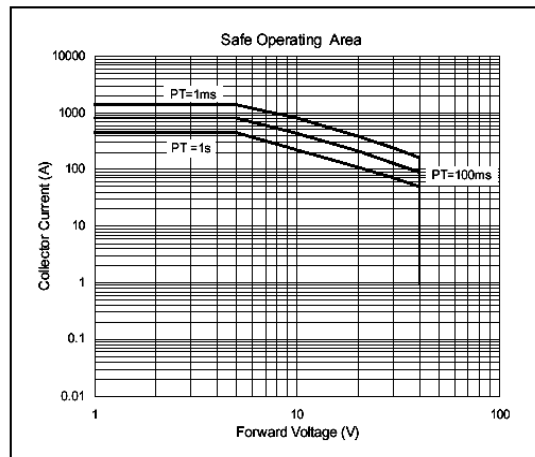
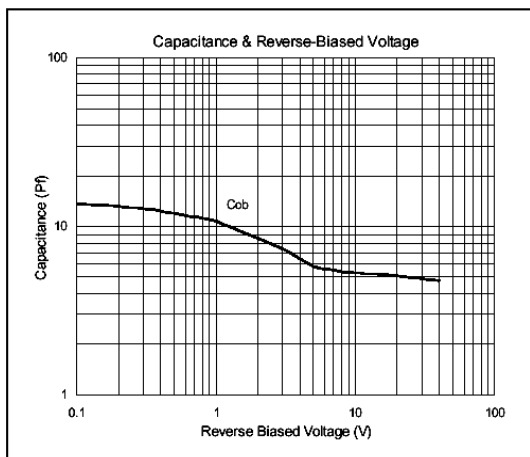
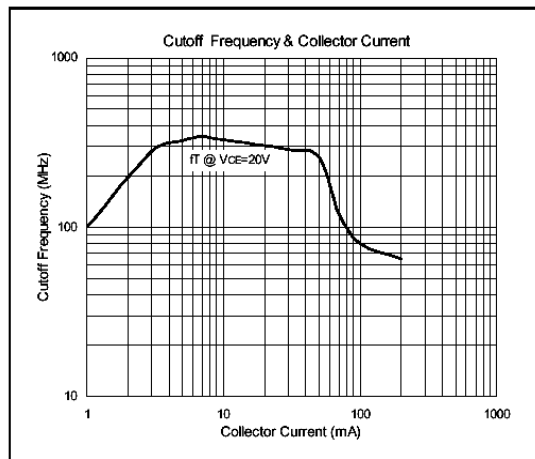
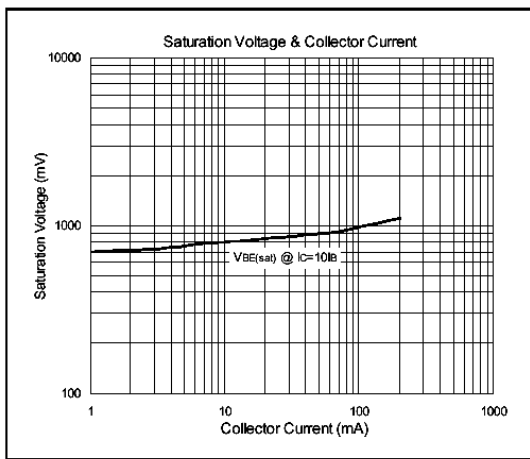
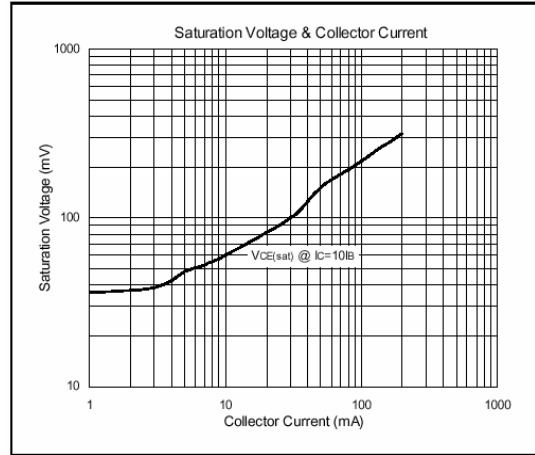
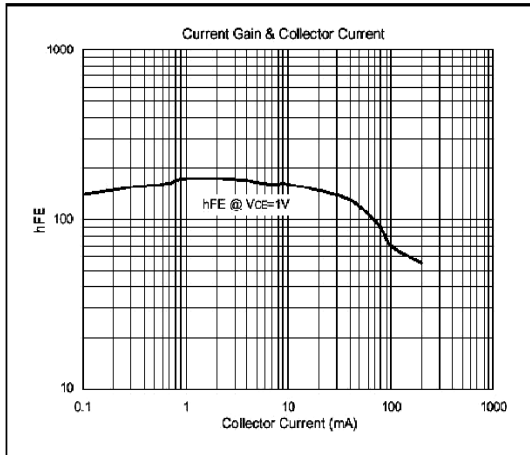
#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55 ~ +150	°C
Collector to Base Voltage	VCBO	-40	V
Collector to Emitter Voltage	VCEO	-40	V
Emitter to Base Voltage	VEBO	-5	V
Collector Current	IC	-200	mA
Total Power Dissipation	PD	300	mW

#### Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-40	-	-	V	IC=-10uA, IE=0
BVCEO	-40	-	-	V	IC=-1mA, IB=0
BVEBO	-5	-	-	V	IE=-10uA, IC=0
ICEX	-	-	-50	nA	VCE=-30V, VEB=-3V
IEBO	-	-	-50	nA	VEB=-3V
VCE(sat)1	-	-	-0.25	V	IC=-10mA, IB=-1mA
VCE(sat)2	-	-	-0.4	V	IC=-50mA, IB=-5mA
VBE(sat)1	-0.65	-	-0.85	V	IC=-10mA, IB=-1mA
VBE(sat)2	-	-	-0.95	V	IC=-50mA, IB=-5mA
hFE1	60	-	-		VCE=-1V, IC=-0.1mA
hFE2	80	-	-		VCE=-1V, IC=-1mA
hFE3	100	-	300		VCE=-1V, IC=-10mA
hFE4	60	-	-		VCE=-1V, IC=-50mA
hFE5	30	-	-		VCE=-1V, IC=-100mA
fT	250	-	-	MHz	VCE=-20V, IE=-10mA, f=100MHz
Cob	-	-	4.5	pF	VCB=-10V, f=100KHz
Cib	-	-	10	pF	VEB=-0.5V, f=100KHz
td	-	-	35	ns	VCC=-3V, VBE(OFF)=-0.5V, IC=-10mA, IB1=-1mA
tr	-	-	35	ns	VCC=-3V, VBE(OFF)=-0.5V, IC=-10mA, IB1=-1mA
tstg	-	-	225	ns	VCC=-3V, IC=-10mA, IB1=-IB2=-1mA
tf	-	-	75	ns	VCC=-3V, IC=-10mA, IB1=-IB2=-1mA

## Characteristics Curve



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