

GMBT3906

PNP EPITAXIAL PLANAR TRANSISTOR

Description

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

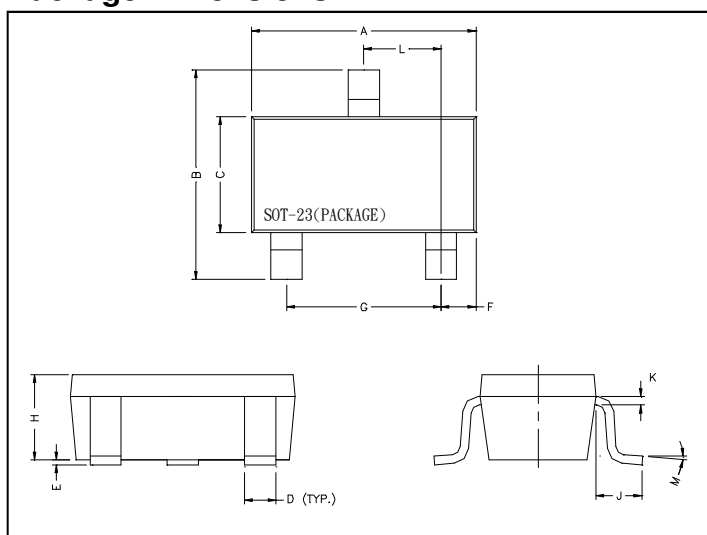
Features

*Pb-free package are available

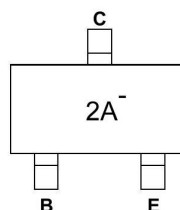
*Collector-emitter voltage -40V

*Complementary to GMBT3904

Package Dimensions



Marking:



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°

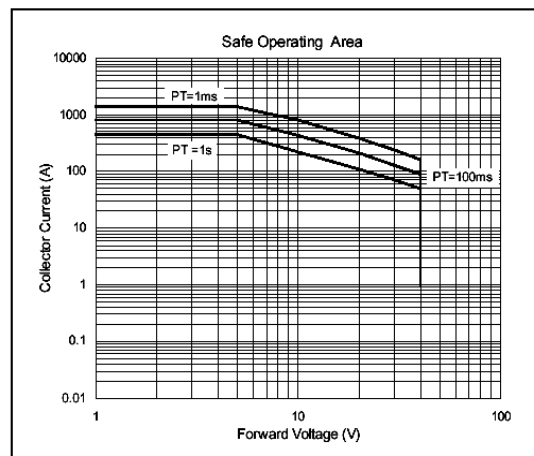
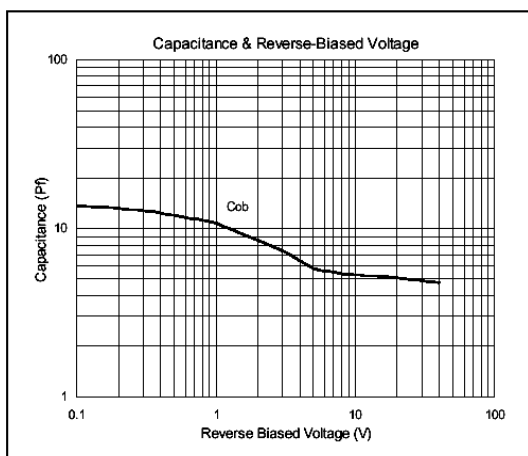
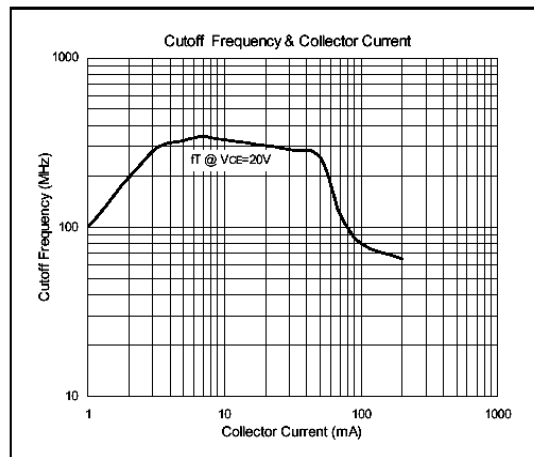
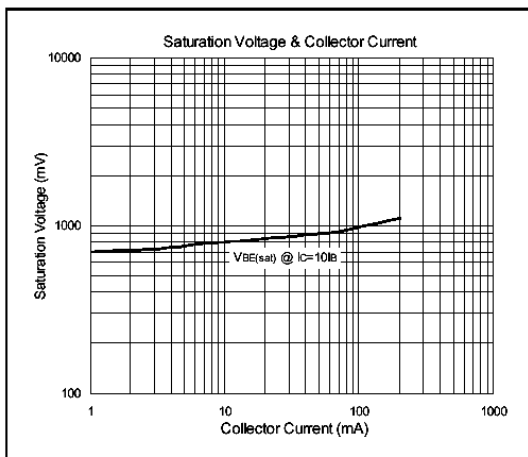
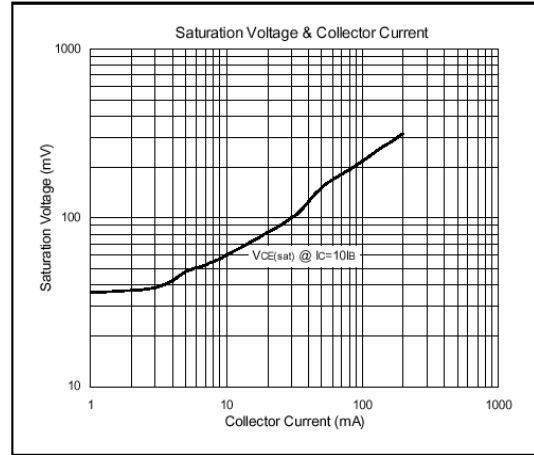
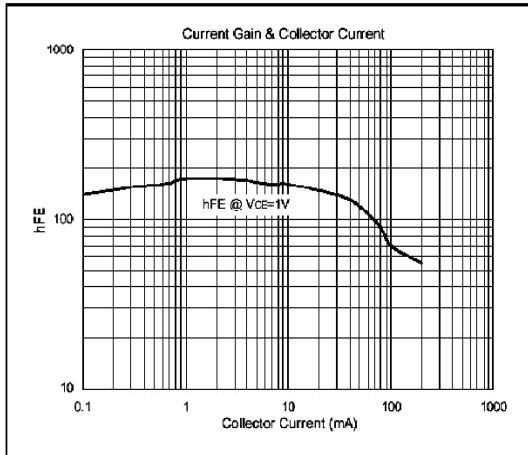
Absolute Maximum Ratings at Ta = 25°C

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



Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

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