

GTM

CORPORATION

ISSUED DATE :2005/06/08
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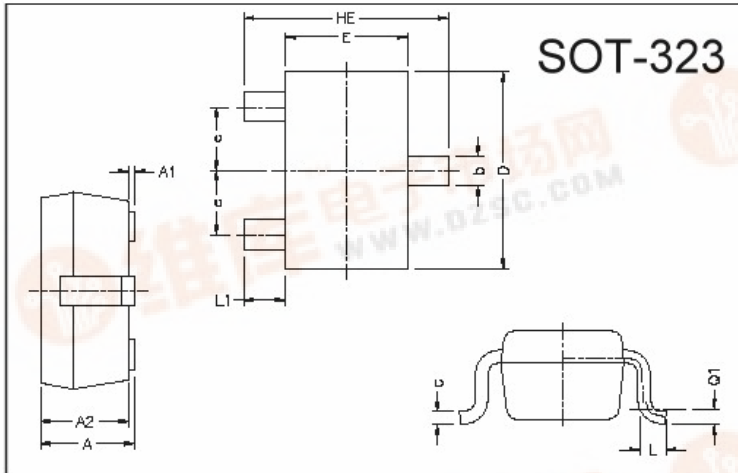
GSMBT3906

PNP EPITAXIAL PLANAR TRANSISTOR

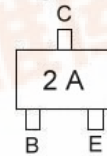
Description

The GSMBT3906 is designed for general purpose switching and amplifier applications.

Package Dimensions



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.80	1.10	L1	0.42 REF.	
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65 REF.	
HE	1.80	2.40	Q1	0.15 BSC.	

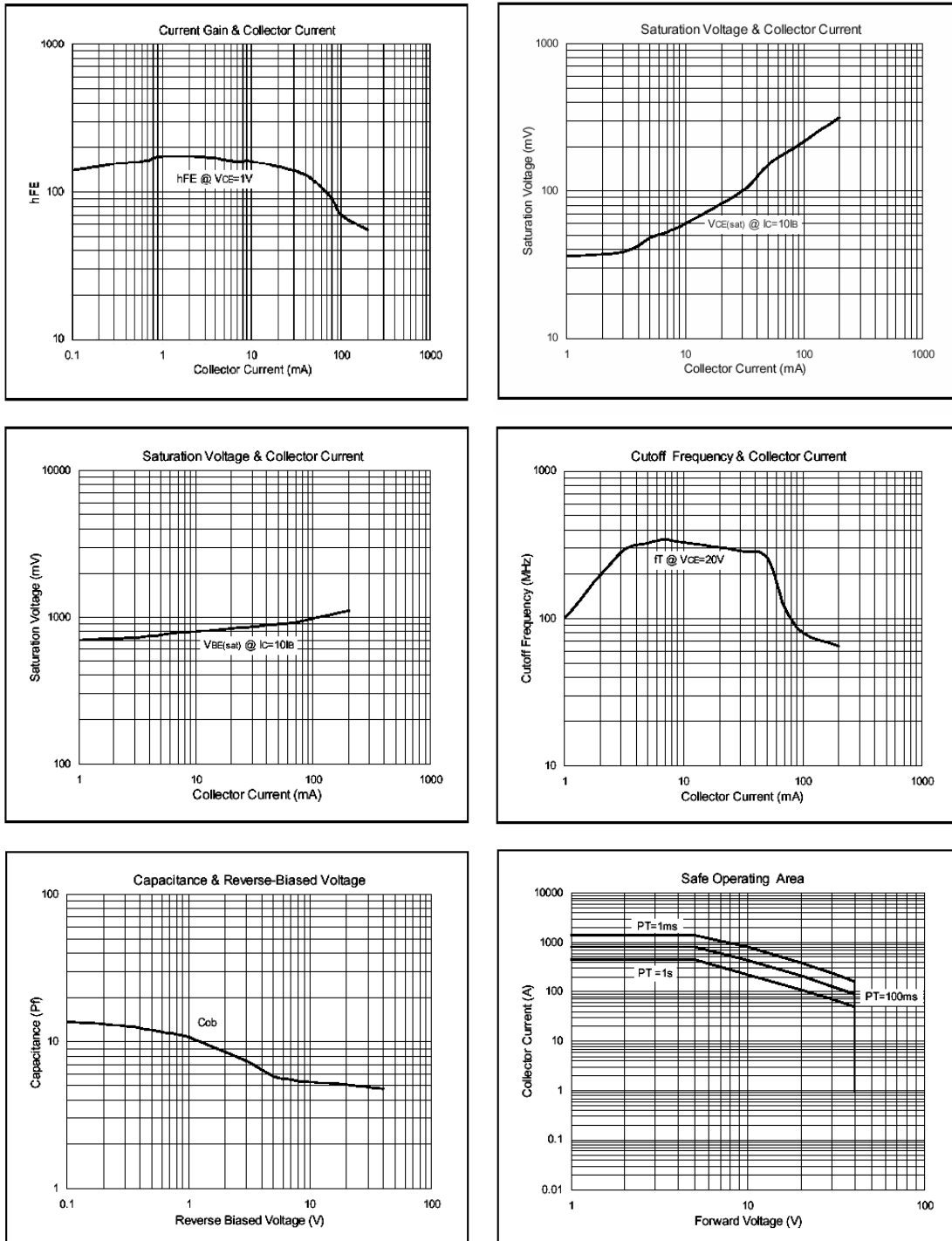
Absolute Maximum Ratings at Ta = 25°C

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
BVCEO	-40	-	-	V	IC=-10mA
BVEBO	-5	-	-	V	IE=-10uA
ICES	-	-	-50	nA	VCB=-30V
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
tstg	-	-	35	ns	VCC=-3V, VBE(OFF)=-0.5V, IC=-10mA, IB1=-1mA
tf	-	-	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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