

GTM CORPORATION

ISSUED DATE :2004/08/25
REVISIED DATE :

GMBT8050L NPN EPITAXIAL TRANSISTOR

Description

The GMBT8050L(large current) is designed for general purpose amplifier applications.

Package Dimensions

SOT-23

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	25	V
Emitter to Base Voltage	VEBO	6	V
Collector Current	IC	1.5	A
Total Power Dissipation	PD	250	mW

Characteristics at Ta = 25°C

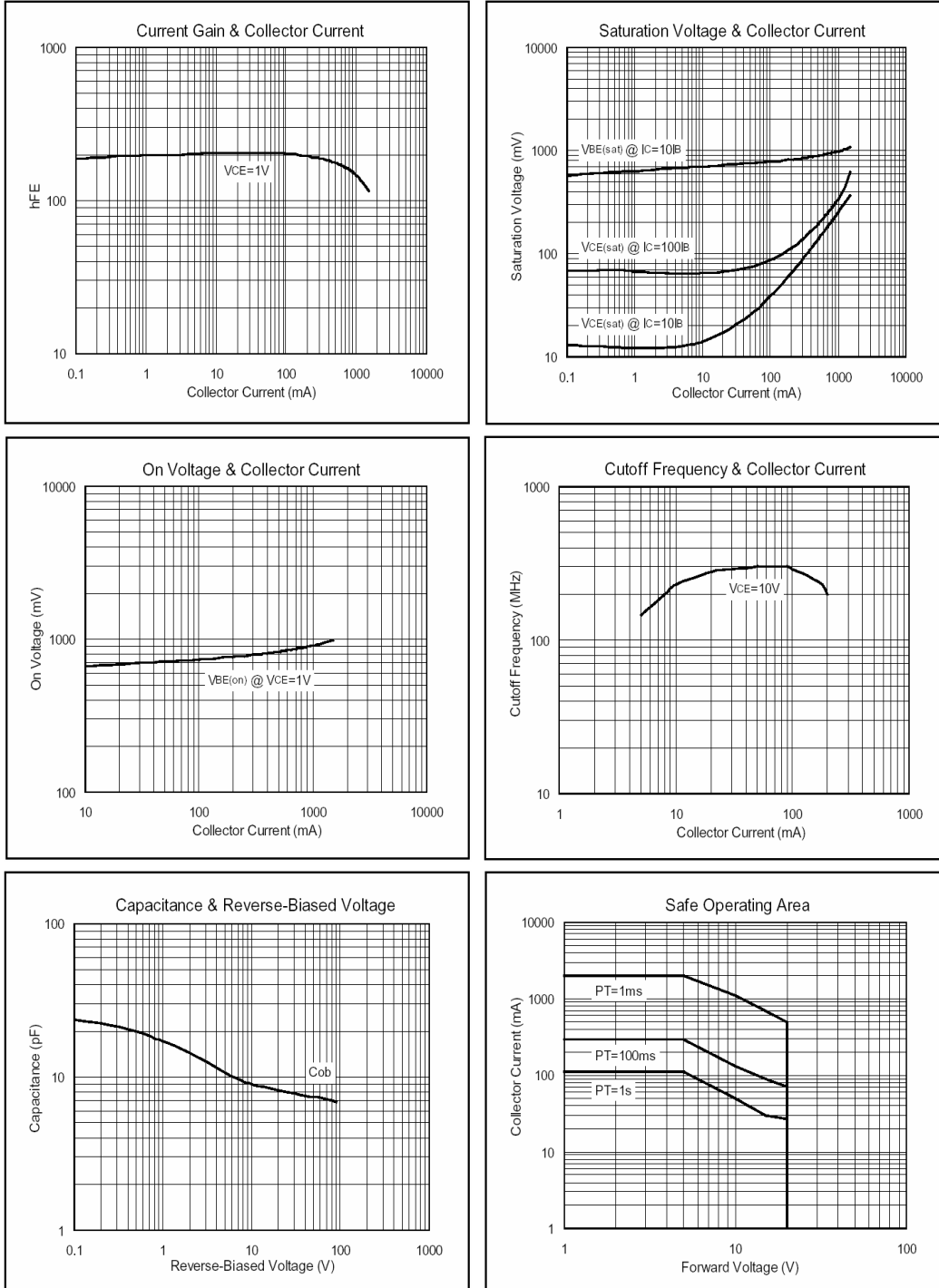
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA, IE=0
BVCEO	25	-	-	V	IC=2mA, IB=0
BVEBO	6	-	-	V	IE=100uA, IC=0
ICBO	-	-	100	nA	VCB=35V, IE=0
IEBO	-	-	100	nA	VEB=6V, IC=0
VCE(sat)	-	-	0.5	V	IC=800mA, IB=80mA
VBE(sat)	-	-	1.2	V	IC=800mA, IB=80mA
VBE(on)	-	-	1	V	VCE=1V, IC=10mA
hFE	45	-	-		VCE=1V, IC=5mA
hFE	120	-	500		VCE=1V, IC=100mA
hFE	40	-	-		VCE=1V, IC=800mA
fT	100	-	-	MHz	VCE=10V, IC=20mA, f=100MHz
Cob	-	-	10	pF	VCB=10V, f=1MHz

Classification Of hFE

Rank	DLC	DLD	DLE
hFE	120 - 200	160 - 300	250 - 500



Characteristics Curve



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