

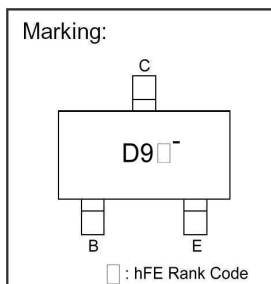
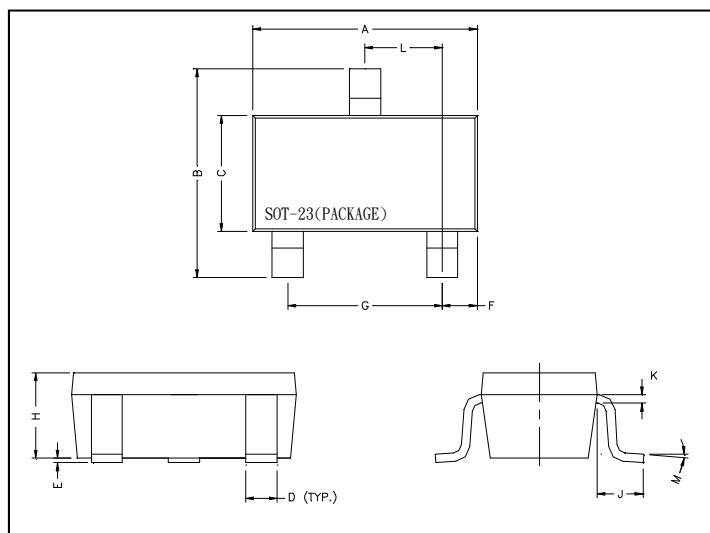
## GMBT8050

### NPN EPITAXIAL TRANSISTOR

#### Description

The GMBT8050 is designed for general purpose amplifier applications.

#### 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	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-55~+150	°C
Collector to Base Voltage	V <sub>CB0</sub>	25	V
Collector to Emitter Voltage	V <sub>CEO</sub>	20	V
Emitter to Base Voltage	V <sub>EB0</sub>	5	V
Collector Current	I <sub>C</sub>	700	mA
Total Power Dissipation	PD	225	mW

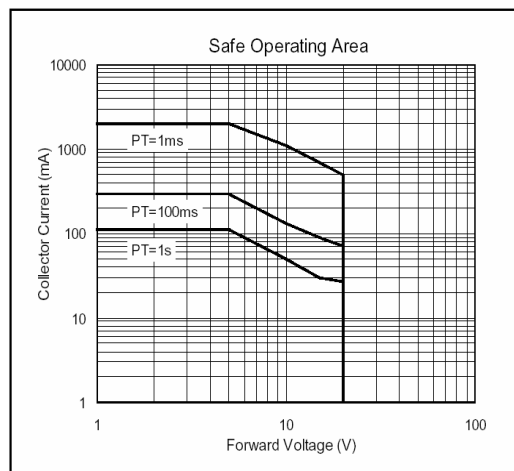
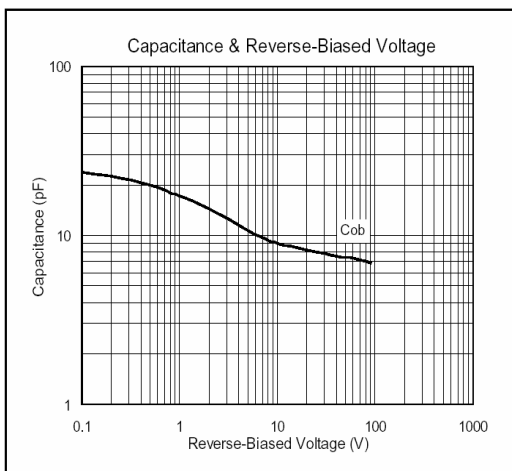
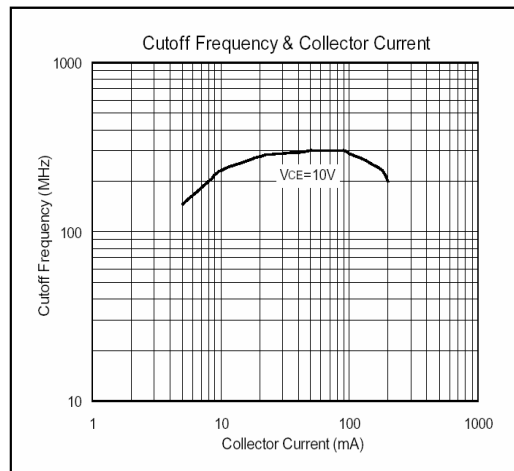
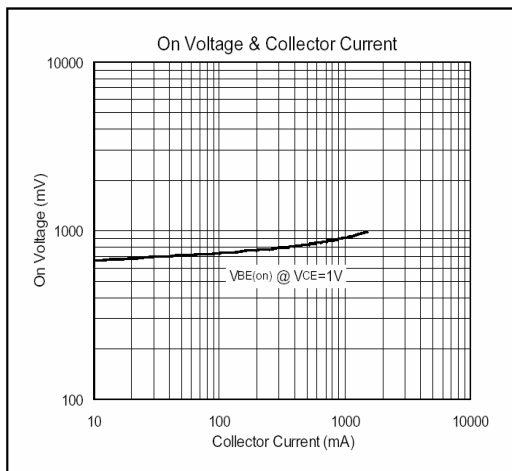
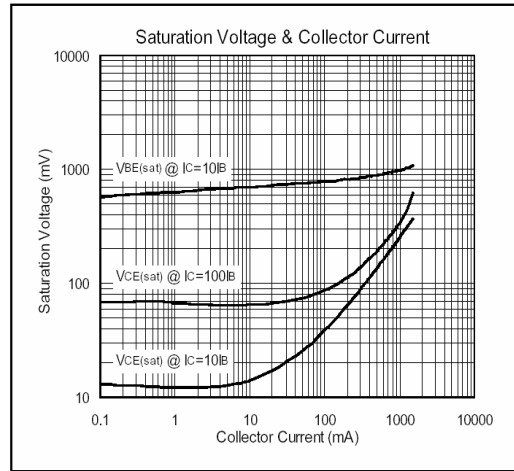
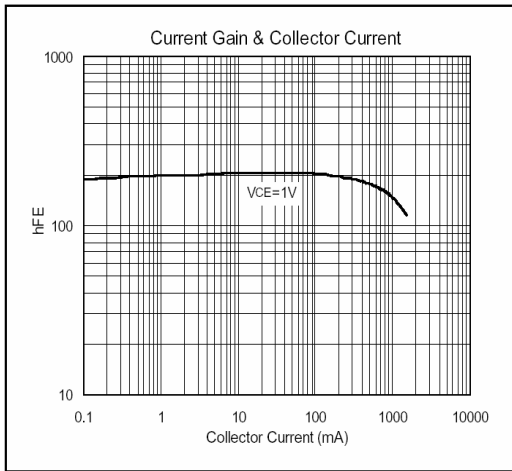
#### Electrical Characteristics (Ta = 25°C, unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V <sub>CB0</sub>	25	-	-	V	I <sub>C</sub> =10uA, I <sub>E</sub> =0
V <sub>CEO</sub>	20	-	-	V	I <sub>C</sub> =1mA, I <sub>B</sub> =0
V <sub>EB0</sub>	5	-	-	V	I <sub>E</sub> =10uA, I <sub>C</sub> =0
I <sub>CB0</sub>	-	-	1	uA	V <sub>CB</sub> =30V, I <sub>E</sub> =0
I <sub>EB0</sub>	-	-	100	nA	V <sub>EB</sub> =5V, I <sub>C</sub> =0
V <sub>CE(sat)</sub>	-	-	500	mV	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA
V <sub>BE(on)</sub>	-	-	1	V	V <sub>CE</sub> =1V, I <sub>C</sub> =150mA
h <sub>FE</sub>	120	-	500		V <sub>CE</sub> =1V, I <sub>C</sub> =150mA
f <sub>T</sub>	150	-	-	MHz	V <sub>CE</sub> =10V, I <sub>C</sub> =20mA, f=100MHz
C <sub>ob</sub>	-	-	10	pF	V <sub>CB</sub> =10V, f=1MHz

#### Classification Of hFE

Rank	D9C	D9D	D9E
hFE	120 ~ 200	150 ~ 300	250 ~ 500

## Characteristics Curve



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