

# GTM CORPORATION

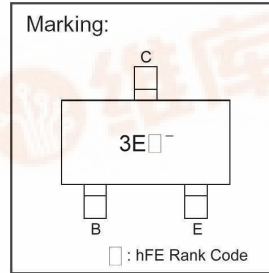
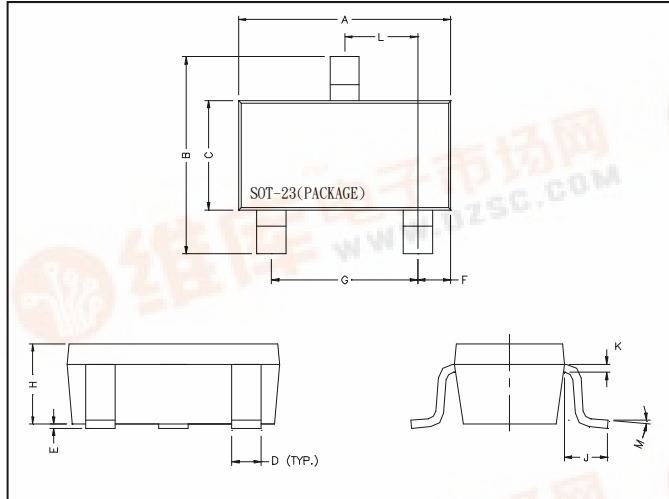
ISSUED DATE :2003/04/12  
REVISED DATE :2004/12/23B

## GMBT9018 NPN EPITAXIAL TRANSISTOR

### Description

The GMBT9018 is designed for use in AM/FM amplifier and local oscillator of FM/VHF tuner.

### 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	30	V
Collector to Emitter Voltage	VCEO	15	V
Emitter to Base Voltage	VEBO	5	V
Collector Current	IC	50	mA
Total Power Dissipation	PD	225	mW

### Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	IC=100uA, IE=0
BVCEO	15	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=100uA, IC=0
ICBO	-	-	50	nA	VCB=12V, IE=0
*VCE(sat)	-	-	0.5	V	IC=10mA, IB=1mA
*hFE	39	-	198		VCE=5V, IC=1mA
fT	700	1100	-	MHz	VCE=5V, IC=5mA
Cob	-	1.3	1.7	pF	VCB=10V, IE=0

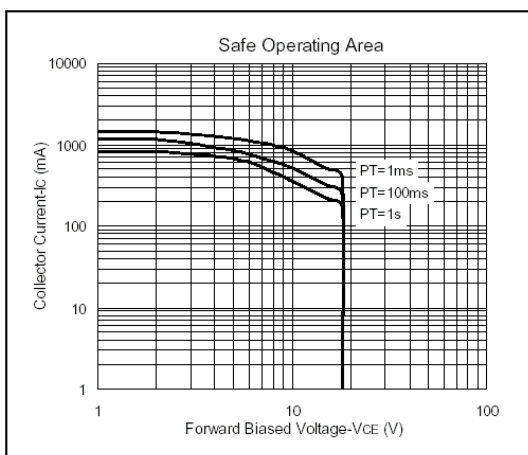
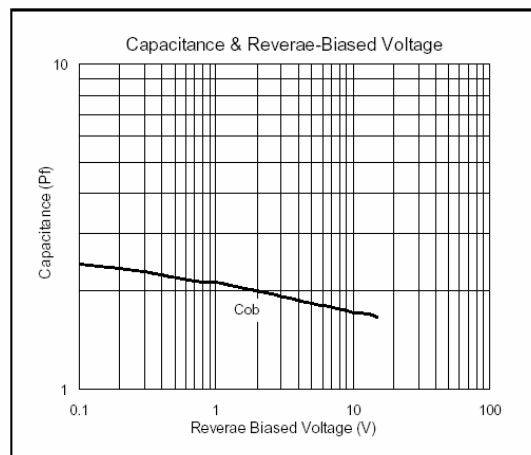
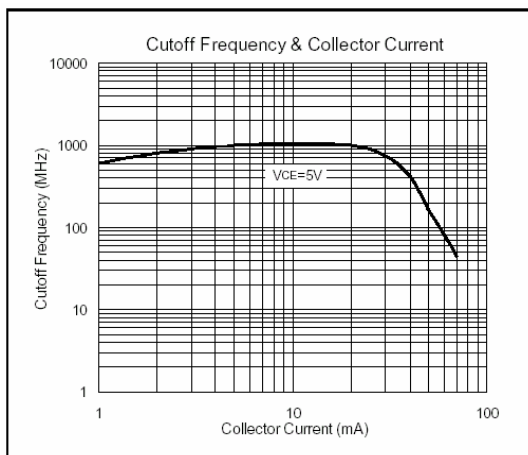
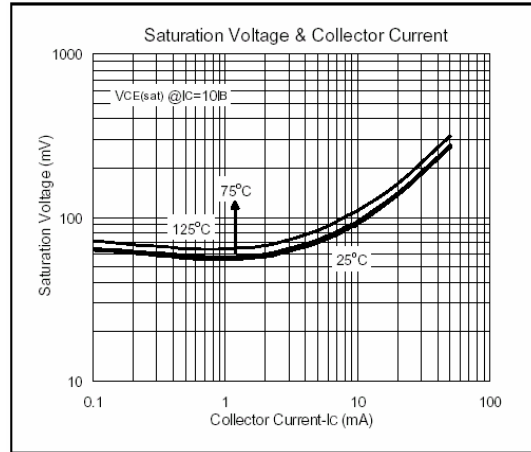
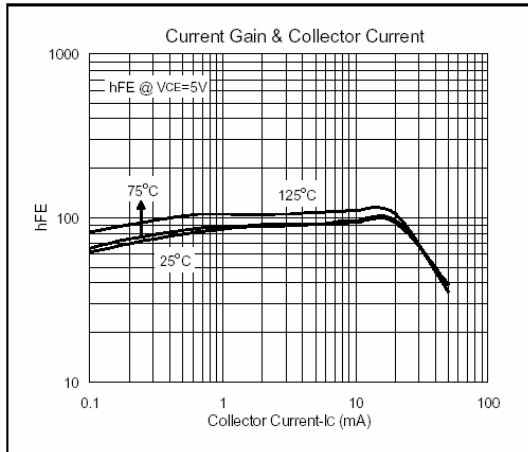
\* Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

### Classification Of hFE

Rank	E	F	G	H	I
Range	39-60	54-80	72-108	97-146	132-198



## Characteristics Curve



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