

## GSMBT2907A

### PNP EPITAXIAL PLANAR TRANSISTOR

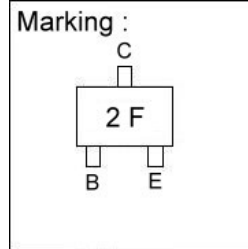
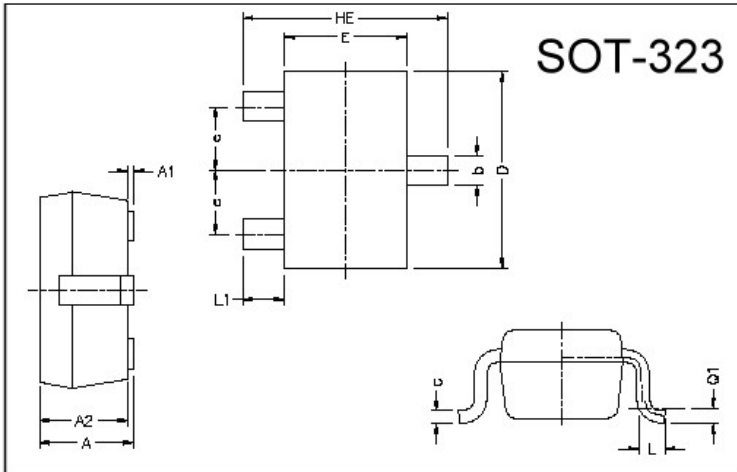
#### Description

The GSMBT2907A is designed for general purpose amplifier and high speed, medium-power switching applications.

#### Features

- Low collector saturation voltage
- High speed switching
- For complementary use with NPN type GSMBT2222A

#### Package Dimensions



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

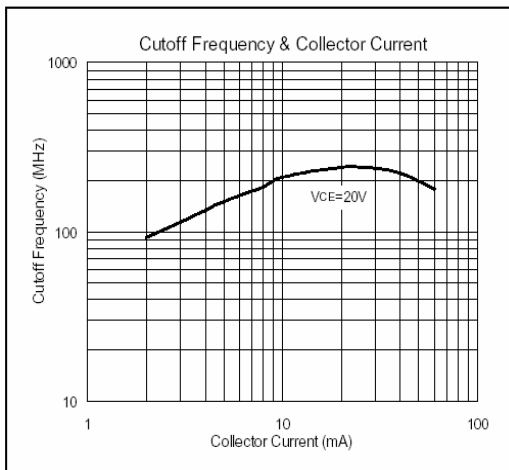
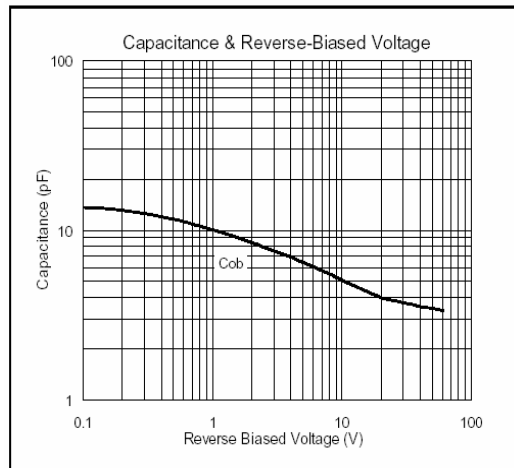
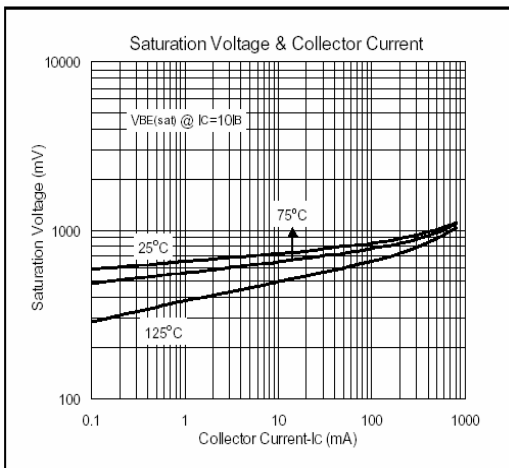
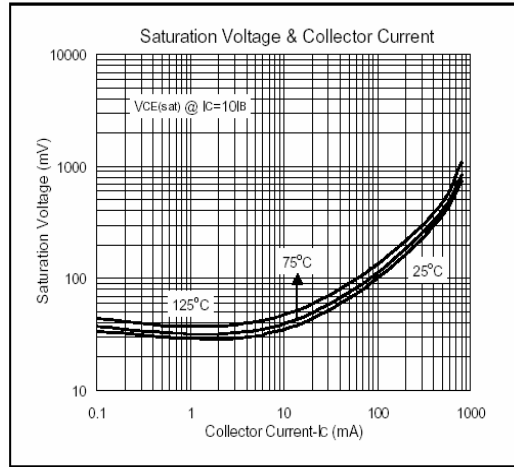
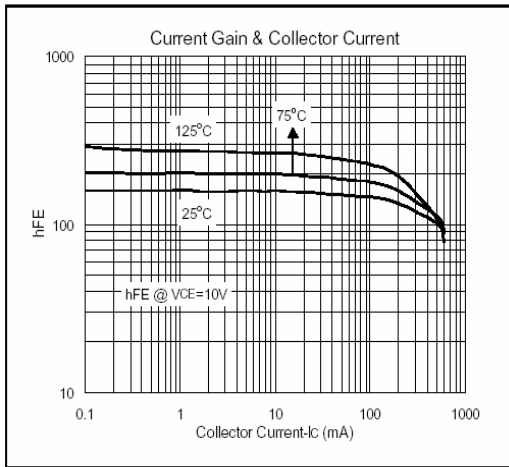
Parameter	Symbol	Ratings	Unit
Junction Temperature	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	°C
Collector to Base Voltage at Ta=25°C	V <sub>CBO</sub>	-60	V
Collector to Emitter Voltage at Ta=25°C	V <sub>CEO</sub>	-60	V
Emitter to Base Voltage at Ta=25°C	V <sub>EBO</sub>	-5	V
Collector Current at Ta=25°C	I <sub>C</sub>	-600	mA
Total Power Dissipation at Ta=25°C	P <sub>D</sub>	225	mW

#### Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V <sub>CBO</sub>	-60	-	-	V	I <sub>C</sub> =-10uA
V <sub>CEO</sub>	-60	-	-	V	I <sub>C</sub> =-10mA
V <sub>EBO</sub>	-5	-	-	V	I <sub>E</sub> =-10uA
I <sub>CBO</sub>	-	-	-10	nA	V <sub>CE</sub> =-50V
I <sub>CEX</sub>	-	-	-50	nA	V <sub>CE</sub> =-30V, V <sub>BE</sub> =-0.5V
*V <sub>CE(sat)1</sub>	-	-0.2	-0.4	V	I <sub>C</sub> =-150mA, I <sub>B</sub> =-15mA
*V <sub>CE(sat)2</sub>	-	-0.5	-1.6	V	I <sub>C</sub> =-500mA, I <sub>B</sub> =-50mA
*V <sub>BE(sat)1</sub>	-	-	-1.3	mV	I <sub>C</sub> =-150mA, I <sub>B</sub> =-15mA
*V <sub>BE(sat)2</sub>	-	-	-2.6	V	I <sub>C</sub> =-500mA, I <sub>B</sub> =-50mA
*h <sub>FE1</sub>	75	-	-		V <sub>CE</sub> =-10V, I <sub>C</sub> =-0.1mA
*h <sub>FE2</sub>	100	-	-		V <sub>CE</sub> =-10V, I <sub>C</sub> =-1mA
*h <sub>FE3</sub>	100	-	-		V <sub>CE</sub> =-10V, I <sub>C</sub> =-10mA
*h <sub>FE4</sub>	100	180	300		V <sub>CE</sub> =-10V, I <sub>C</sub> =-150mA
*h <sub>FE5</sub>	50	-	-		V <sub>CE</sub> =-10V, I <sub>C</sub> =-500mA
f <sub>T</sub>	200	-	-	MHz	V <sub>CE</sub> =-20V, I <sub>C</sub> =-50mA, f=100MHz
C <sub>ob</sub>	-	-	8.0	pF	V <sub>CE</sub> =-10V, f=1MHz

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

## Characteristics Curve



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