

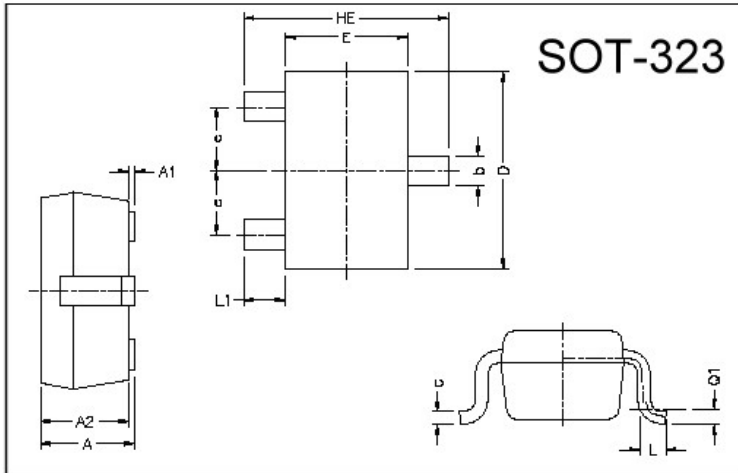
## G SMBTA05

### NPN SILICON TRANSISTOR

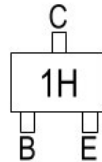
#### Description

The GSMBTA05 is designed for general purpose 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

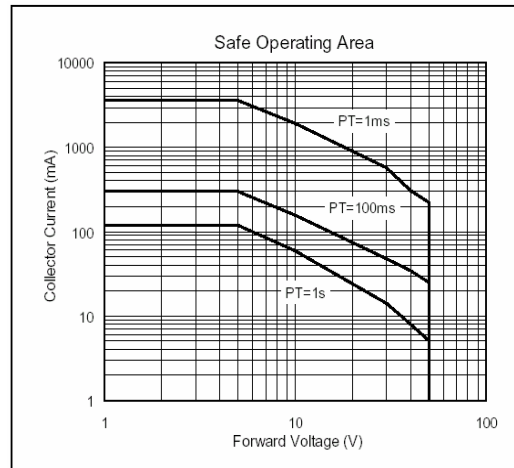
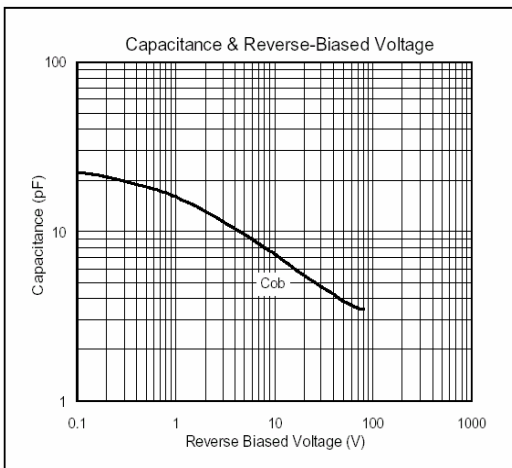
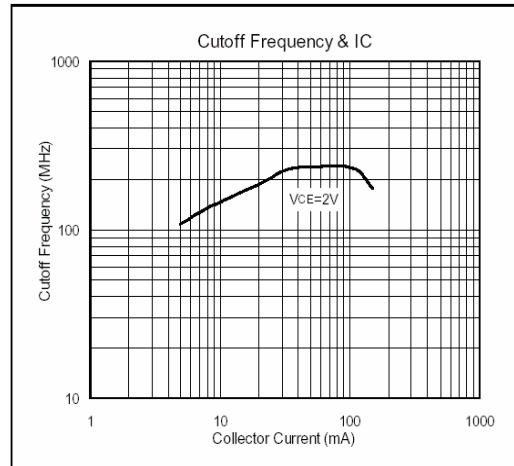
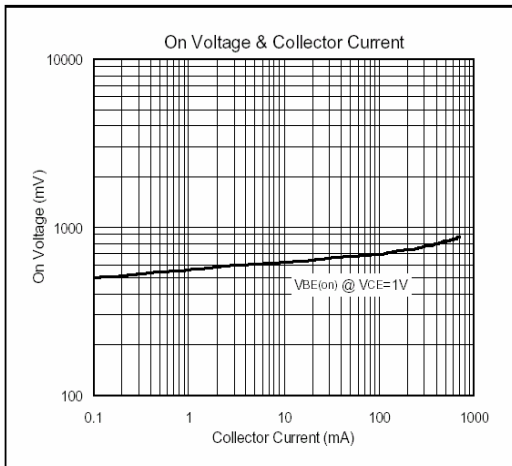
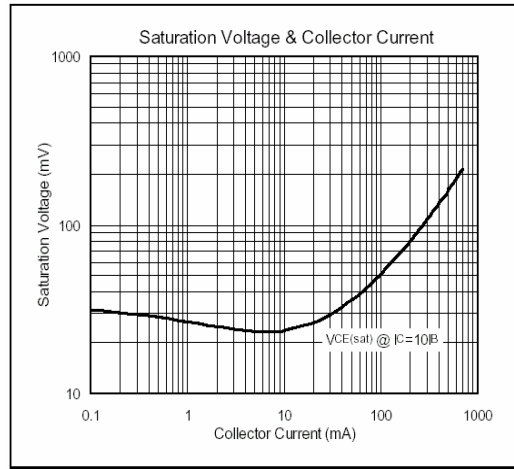
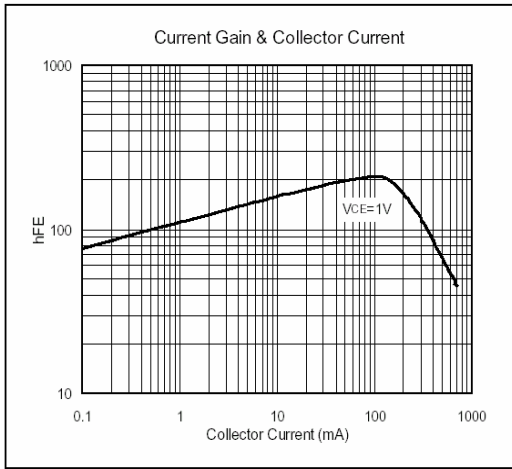
Parameter	Symbol	Ratings	Unit
Junction Temperature	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-55~+150	°C
Collector to Base Voltage	V <sub>CB0</sub>	60	V
Collector to Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter to Base Voltage	V <sub>EBO</sub>	4	V
Collector Current	I <sub>c</sub>	500	mA
Total Power Dissipation	P <sub>d</sub>	225	mW

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

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV <sub>CB0</sub>	60	-	-	V	I <sub>c</sub> =100uA, I <sub>E</sub> =0
BV <sub>CEO</sub>	60	-	-	V	I <sub>c</sub> =1mA, I <sub>B</sub> =0
BV <sub>EBO</sub>	4	-	-	V	I <sub>E</sub> =100uA, I <sub>c</sub> =0
I <sub>CB0</sub>	-	-	100	nA	V <sub>CB</sub> =60V, I <sub>E</sub> =0
I <sub>CEO</sub>	-	-	100	nA	V <sub>CE</sub> =60V, I <sub>B</sub> =0
*V <sub>CE(sat)</sub>	-	-	250	mV	I <sub>c</sub> =100mA, I <sub>B</sub> =10mA
*V <sub>BE(on)</sub>	-	-	1.2	V	V <sub>CE</sub> =1V, I <sub>c</sub> =100mA
*h <sub>FE1</sub>	50	-	-		V <sub>CE</sub> =1V, I <sub>c</sub> =10mA
*h <sub>FE2</sub>	50	-	-		V <sub>CE</sub> =1V, I <sub>c</sub> =100mA
f <sub>T</sub>	100	-	-	MHz	V <sub>CE</sub> =2V, I <sub>c</sub> =10mA, f=100MHz

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

## Characteristics Curve



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