

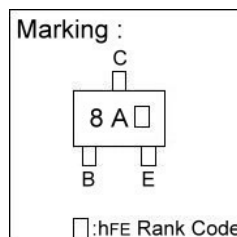
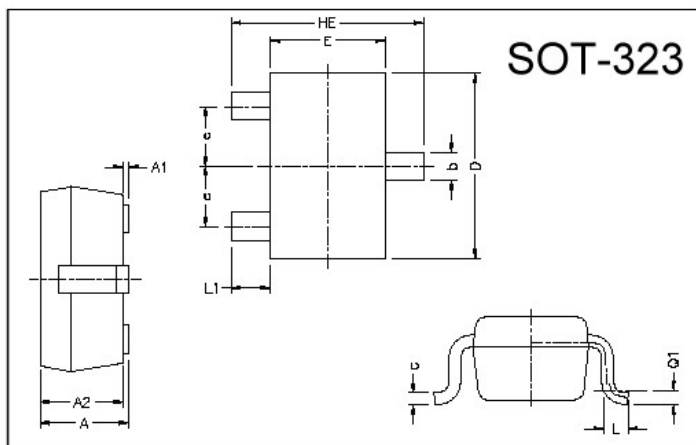
## GSBC846

### NPN EPITAXIAL PLANAR TRANSISTOR

#### Description

The GSBC846 is designed for switching and AF amplifier application, suitable for automatic insertion in thick and thin-film circuits.

#### 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	Tj	+150	°C
Storage Temperature	Tstg	-55 ~ +150	°C
Collector to Base Voltage	VCBO	80	V
Collector to Emitter Voltage	VCEO	65	V
Emitter to Base Voltage	VEBO	6	V
Collector Current	IC	100	mA
Total Power Dissipation	PD	225	mW

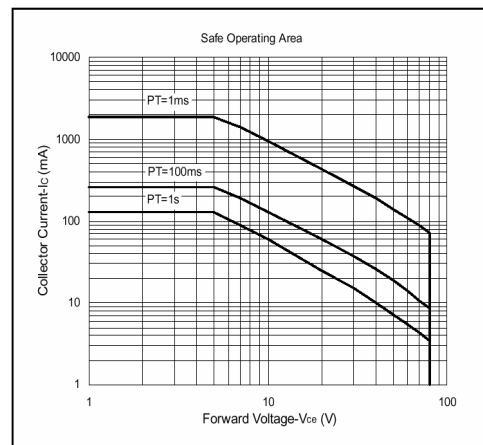
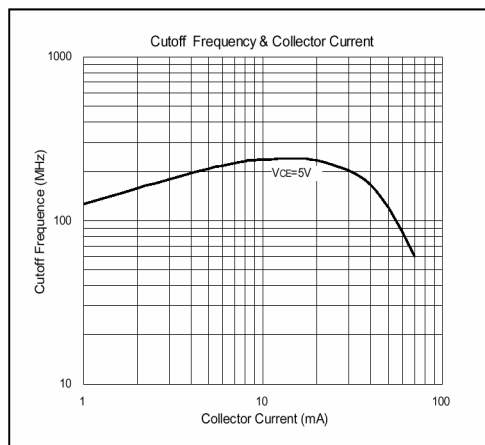
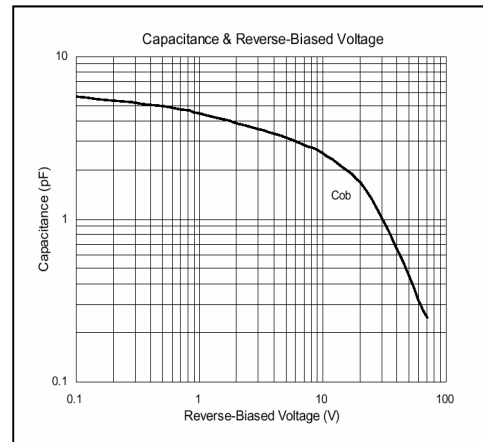
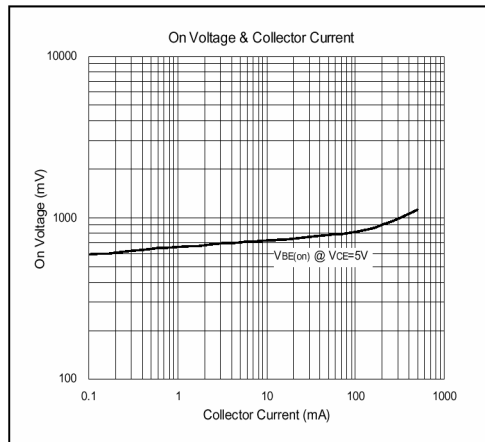
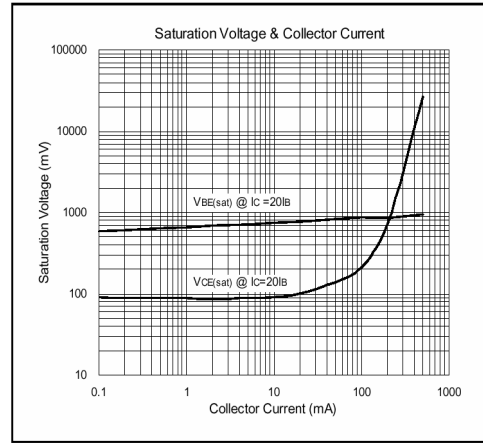
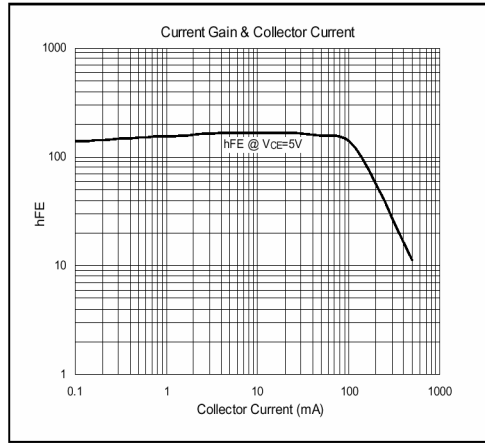
#### Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	80	-	-	V	IC=100uA
BVCEO	65	-	-	V	IC=1mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	15	nA	VCB=30V
VCE(sat)1	-	90	250	mV	IC=10mA, IB=0.5mA
VCE(sat)2	-	200	600	mV	IC=100mA, IB=5mA
VBE(sat)1	-	700	-	mV	IC=10mA, IB=0.5mA
VBE(sat)2	-	900	-	mV	IC=100mA, IB=5mA
VBE(on)1	580	-	700	mV	VCE=5V, IC=2mA
VBE(on)2	-	-	770	mV	VCE=5V, IC=10mA
hFE	110	-	800		VCE=5V, IC=2mA
fT	-	300	-	MHz	VCE=5V, IC=10mA, f=100MHz
Cob	-	3.5	6	pF	VCB=10V, f=1MHz, IE=0A

#### Classification Of hFE

Rank	8AA	8AB	8AC
Range	110 - 220	200 - 450	420 - 800

## Characteristics Curve



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