

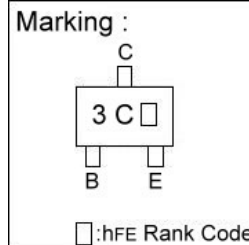
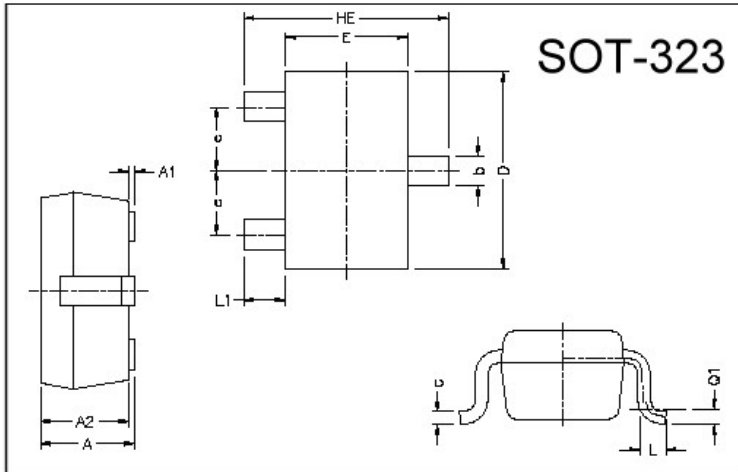
GSMBT9014

NPN EPITAXIAL TRANSISTOR

Description

The GSMBT9014 is designed for general purpose amplifier applications.

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	50	V
Collector to Emitter Voltage	VCEO	45	V
Emitter to Base Voltage	VEBO	5	V
Collector Current	IC	100	mA
Total Power Dissipation	PD	225	mW

Characteristics at Ta = 25°C

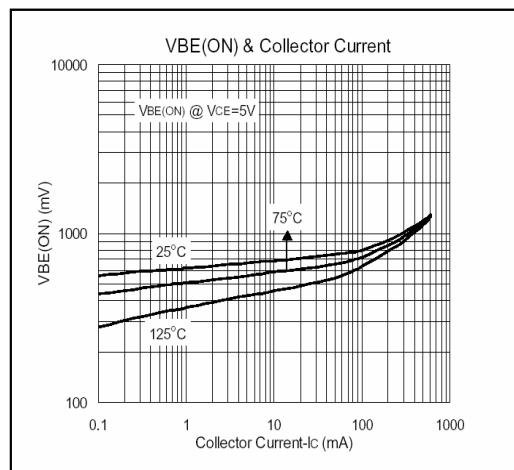
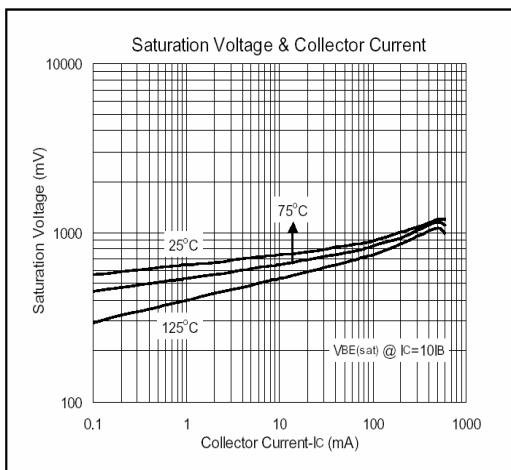
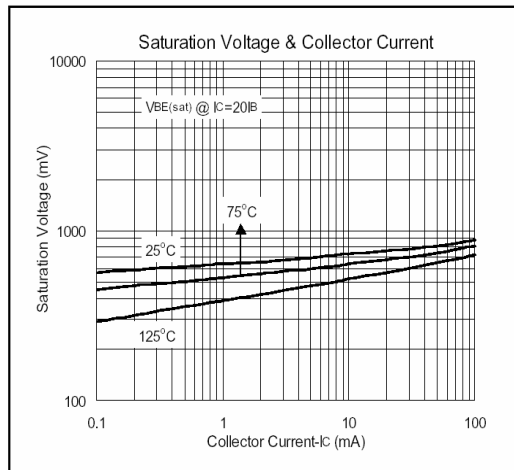
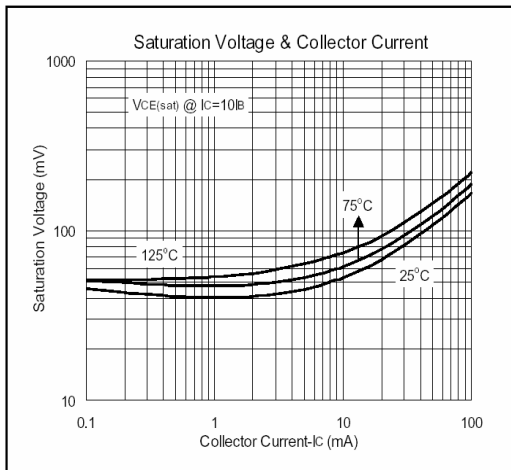
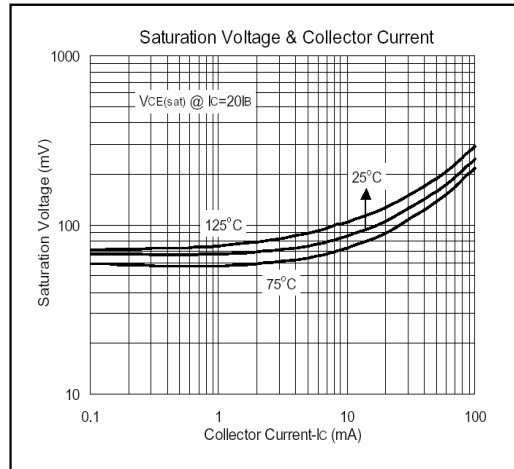
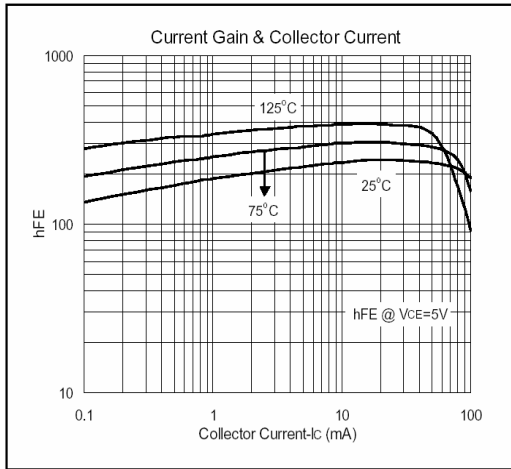
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	50	-	-	V	IC=100uA, IE=0
BVCEO	45	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=100uA, IC=0
ICBO	-	-	50	nA	VCB=50V, IE=0
IEBO	-	-	50	nA	VEB=5V, IC=0
*VCE(sat)	-	0.14	0.3	V	IC=100mA, IB=5mA
*VBE(sat)	-	0.84	1	V	IC=100mA, IB=5mA
VBE(on)	0.58	0.63	0.7	V	VCE=5V, IC=2mA
*hFE	100	280	1000		VCE=5V, IC=1mA
fT	150	270	-	MHz	VCE=5V, IC=10mA
Cob	-	2.20	3.5	pF	VCB=10V, f=1MHz, IE=0

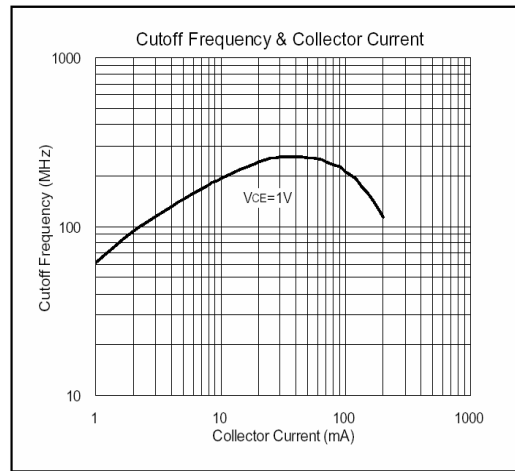
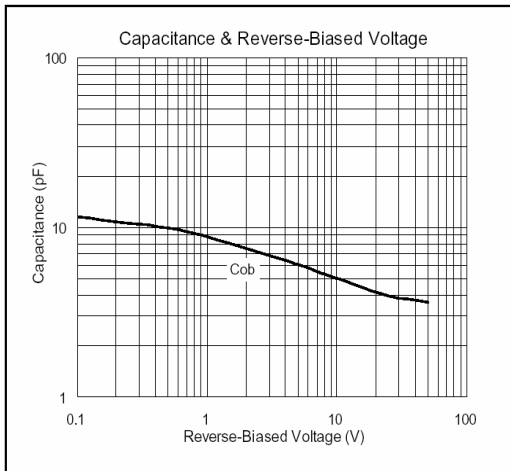
* Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification Of hFE

Rank	3CB	3CC	3CD
Range	100 - 300	200 - 600	400 - 1000

Characteristics Curve





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