

GSMBT2014 PNP EPITAXIAL PLANAR TRANSISTOR

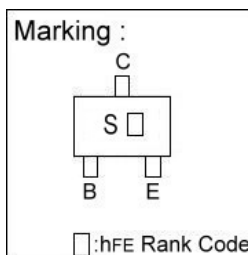
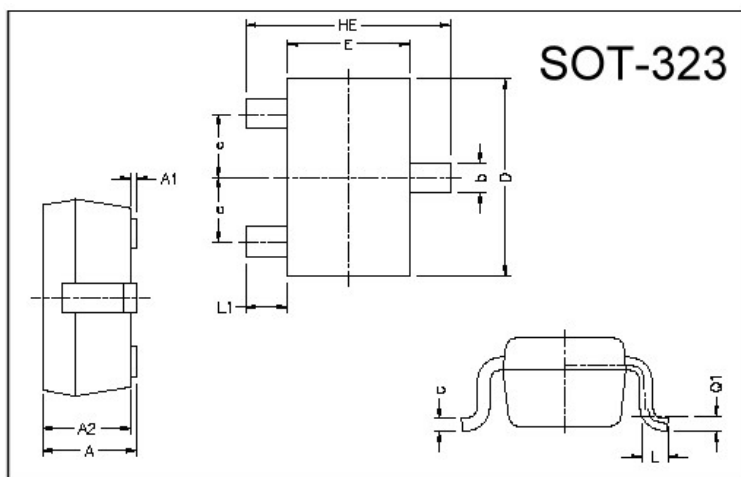
Description

The GSMBT2014 is designed for general purpose switching and amplifier applications.

Features

- Excellent hFE Linearity : $h_{FE}(0.1\text{mA})/h_{FE}(2\text{mA})=0.95$ (Typ.)
- Complementary to GSMBT4075

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	-50	V
Emitter to Base Voltage	VEBO	-5	V
Collector Current	Ic	-150	mA
Base Current	Ib	-30	mA
Total Power Dissipation	PD	225	mW

Electrical Characteristics (Ta = 25°C)

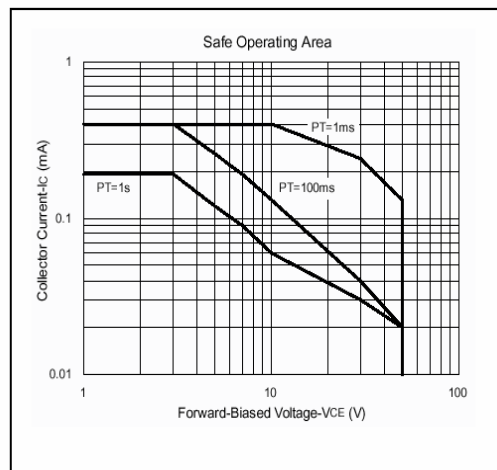
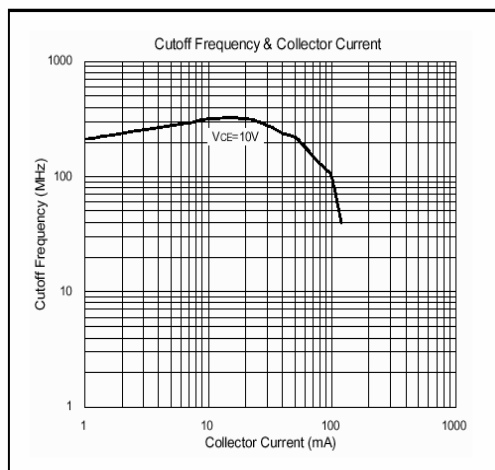
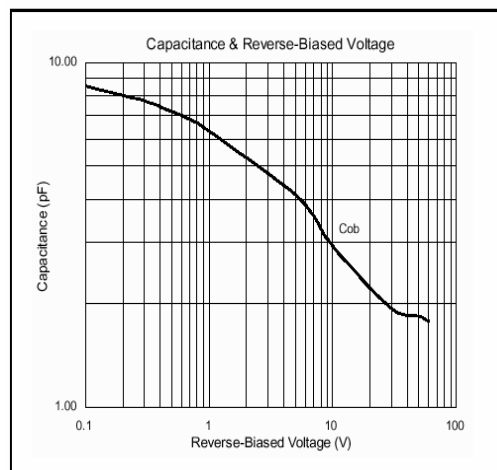
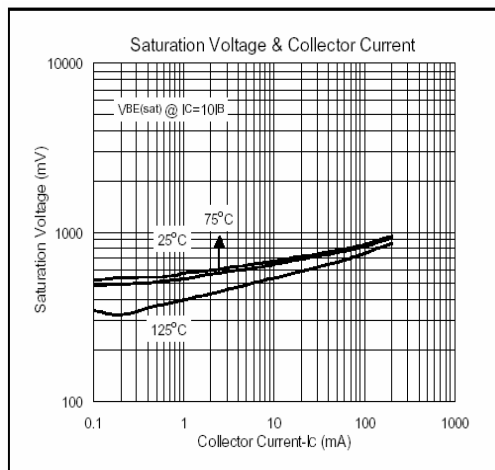
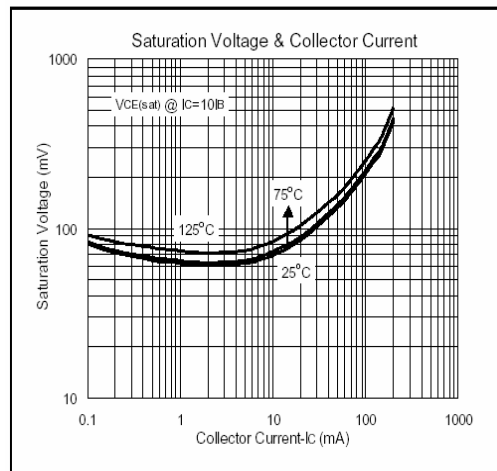
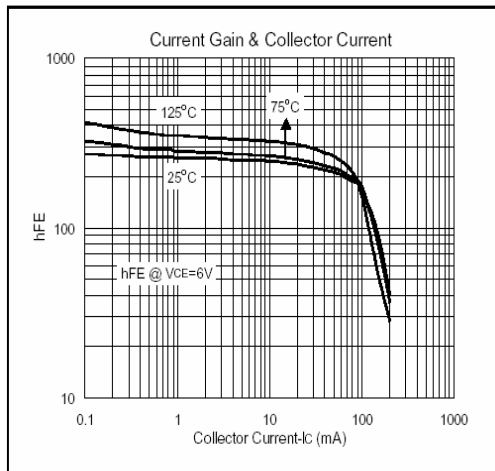
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-50	-	-	V	Ic=-100uA, IE=0
BVCEO	-50	-	-	V	Ic=-1mA, Ib=0
BVEBO	-5	-	-	V	IE=-10uA, Ic=0
ICBO	-	-	-100	nA	VCB=-50V, IE=0
IEBO	-	-	-100	nA	VEB=-5V, Ic=0
*VCE(sat)	-	-	-300	mV	Ic=-100mA, Ib=-10mA
*VBE(sat)	-	-	-1.1	V	Ic=-100mA, Ib=-10mA
*hFE1	70	-	400		VCE=-6V, Ic=-2mA
*hFE2	25	-	-		VCE=-6V, Ic=-150mA
fT	80	-	-	MHz	VCE=-10V, Ic=-1mA, f=100MHz
Cob	-	-	7	pF	VCB=-10V, IE=0, f=1MHz

* Pulse Test: Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification Of hFE1

Rank	SO	SY	SG
Range	70 - 140	120 - 240	200 - 400

Characteristics Curve



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Head Office And Factory:

- **Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
- TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- **China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
- TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165