GTM CORPORATION

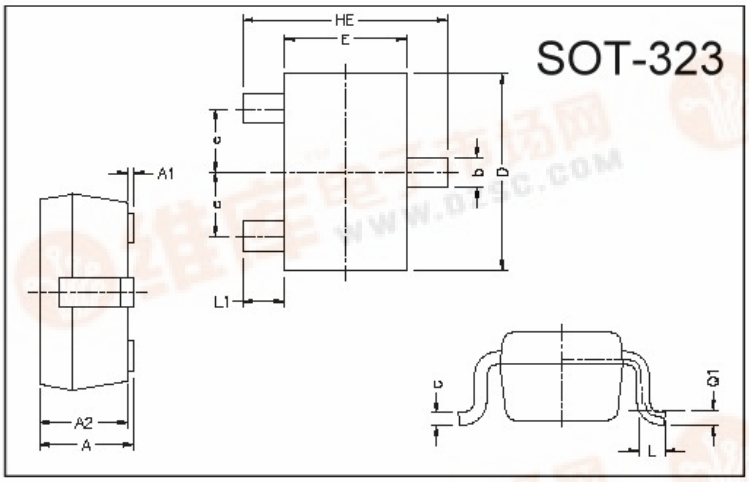
ISSUED DATE :2004/12/20
REVISED DATE :

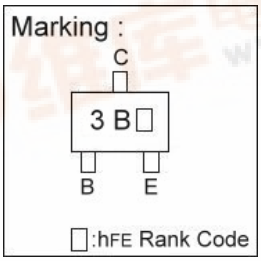
GSMBT9013 NPN EPITAXIAL TRANSISTOR

Description

The GSMBT9013 is designed for use in 1W output amplifier of portable radios in class B push-pull operation.

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℃

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	℃
Storage Temperature	Tstg	-55 ~ +150	℃
Collector to Base Voltage	VCBO	40	V
Collector to Emitter Voltage	VCEO	20	V
Emitter to Base Voltage	VEBO	5	V
Collector Current	IC	500	mA
Total Power Dissipation	PD	225	mW

Characteristics at Ta = 25℃

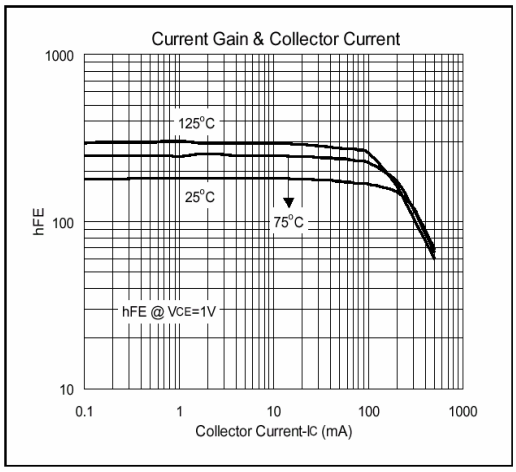
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA , IE=0
BVCEO	20	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=100uA, IC=0
ICBO	-	-	100	nA	VCB=25V, IE=0
IEBO	-	-	100	nA	VEB=3V, IC=0
*VCE(sat)	-	-	0.6	V	IC=500mA, IB=50mA
*VBE(sat)	-	-	1.2	V	IC=500mA, IB=50mA
VBE(on)	-	-	0.9	V	VCE=1V, IC=10mA
*hFE1	112	180	300		VCE=1V, IC=50mA
*hFE2	40	-	-		VCE=1V, IC=500mA
fT	100	-	-	MHz	VCE=1V, IC=10mA, f=100MHz
Cob	-	-	8	pF	VCB=10V, f=1MHz

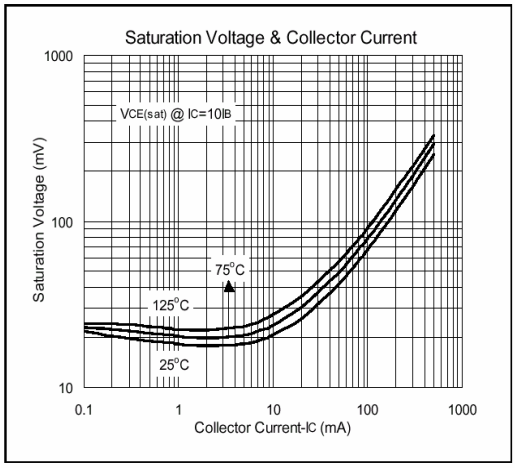
*** Pulse Test: Pulse Width≦380μs, Duty Cycle≦2%**

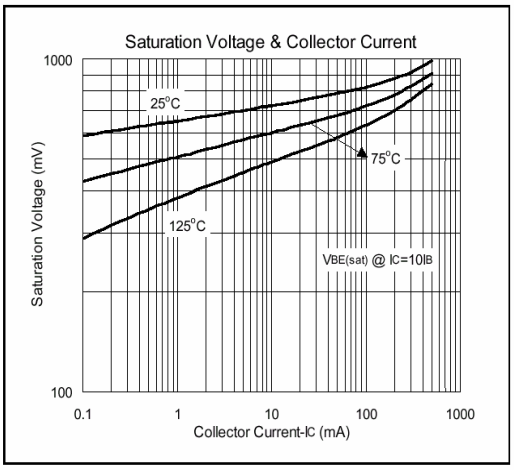
Classification Of hFE1

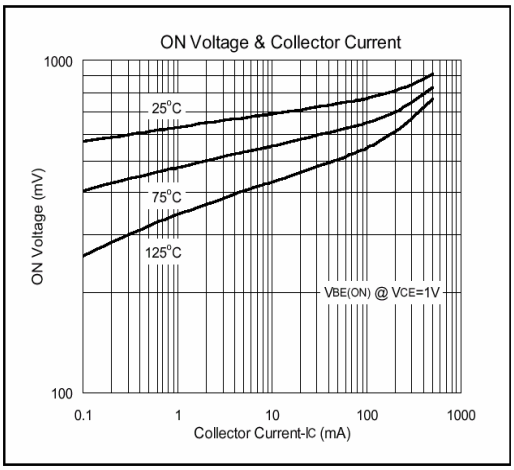
Rank	3BG	3BH	3BL
Range	112 - 166	144 - 202	176 - 300

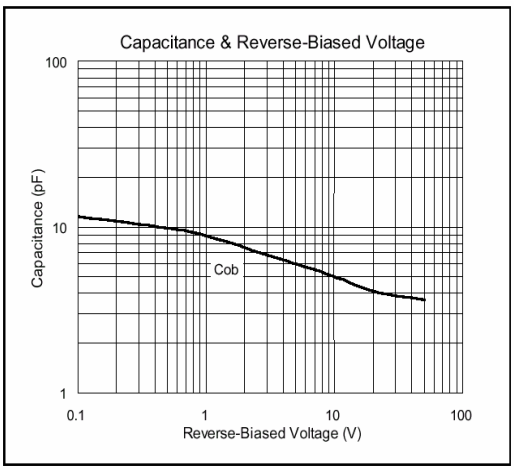
Characteristics Curve

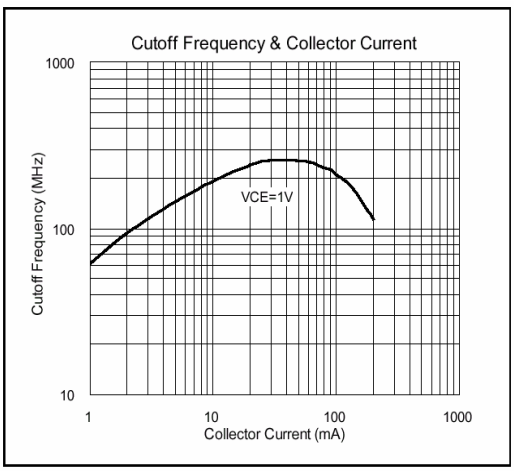












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