

GTM CORPORATION

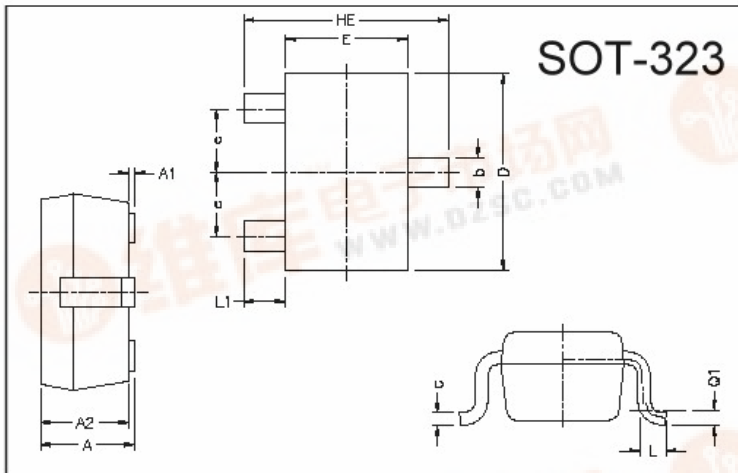
ISSUED DATE :2005/08/31
REVISED DATE :2006/05/10B

GSMBTA13 NPN EPITAXIAL PLANAR TRANSISTOR

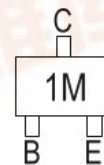
Description

The GSMBTA13 is designed for Darlington 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

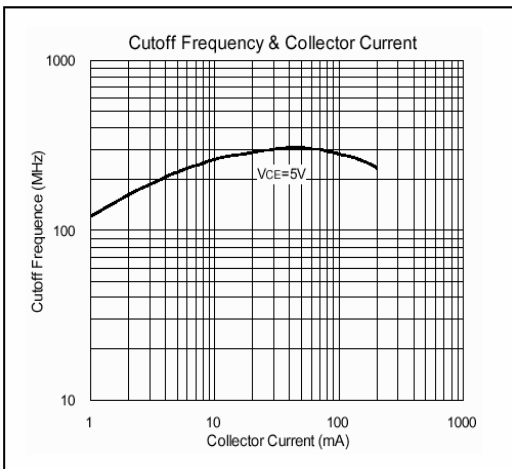
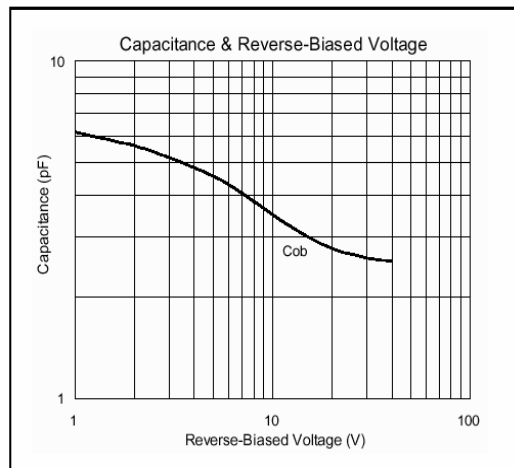
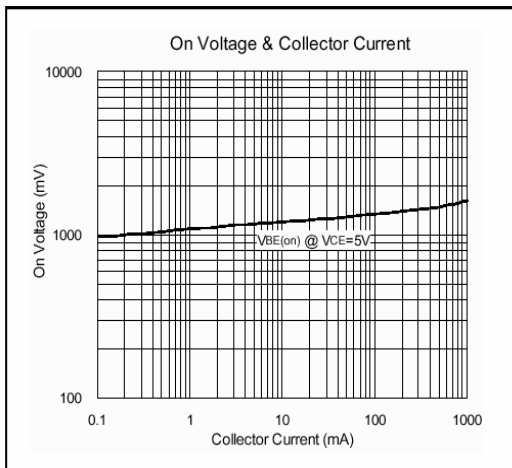
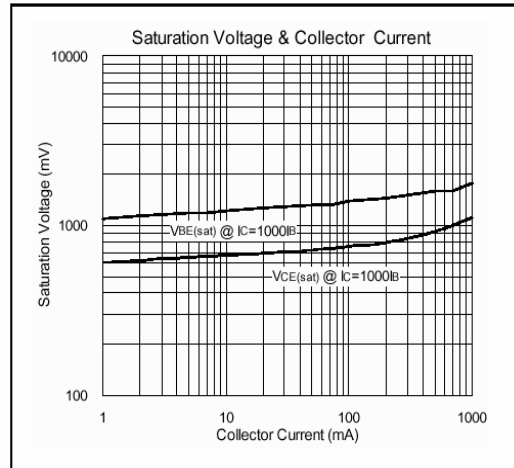
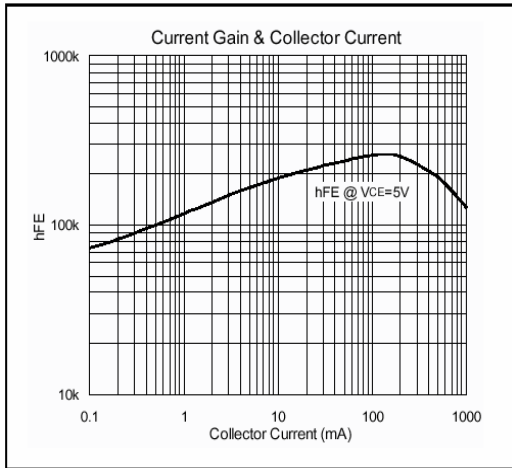
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55~+150	°C
Collector to Base Voltage	VCBO	30	V
Collector to Emitter Voltage	VCEO	30	V
Emitter to Base Voltage	VEBO	10	V
Collector Current	Ic	500	mA
Total Power Dissipation	PD	225	mW

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

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	Ic=100uA, IE=0
BVCEO	30	-	-	V	Ic=100uA, Ib=0
BVEBO	10	-	-	V	IE=10uA, Ic=0
ICBO	-	-	100	nA	VCB=30V, IE=0
IEBO	-	-	100	nA	VEB=10V, Ic=0
*VCE(sat)	-	-	1.5	V	Ic=100mA, Ib=0.1mA
*VBE(on)	-	-	2.0	V	VCE=5V, Ic=100mA
*hFE1	5K	-	-		VCE=5V, Ic=10mA
*hFE2	10K	-	-		VCE=5V, Ic=100mA
fT	125	-	-	MHz	VCE=5V, Ic=10mA, f=100MHz
Cob	-	-	6	pF	VCB=10V, IE=0, f=1MHz

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

Characteristics Curve



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