

GM1300

PNP SILICON EPITAXIAL TRANSISTOR

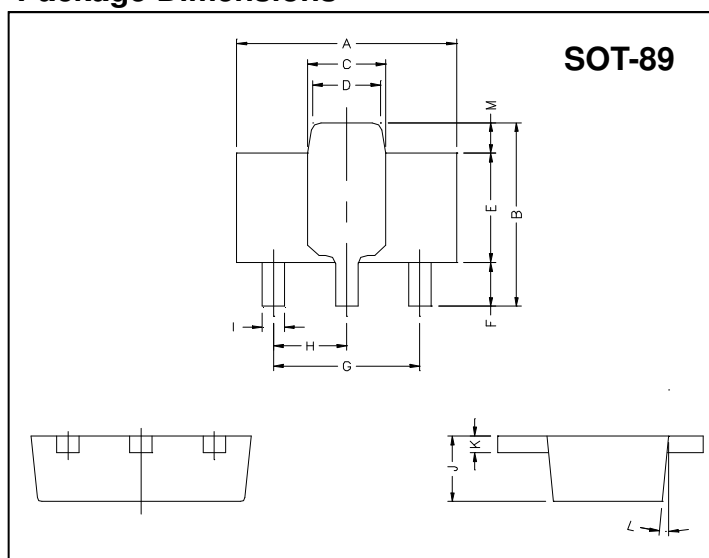
Description

The GM1300 is designed for medium power amplifier applications.

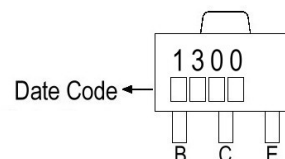
Features

- $h_{FE(1)}=140\sim1000$ (@ $V_{CE}=-1V$, $I_C=-0.5A$)
- $h_{FE(2)}=60$ (Min.) (@ $V_{CE}=-1V$, $I_C=-2A$)
- Low Saturation Voltage $V_{CE(sat)}=-0.5$ (Max.) (@ $I_C=-2A$, $I_B=-50mA$)

Package Dimensions



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

Absolute Maximum Ratings at $T_a = 25^\circ C$

Parameter	Symbol	Ratings	Unit
Junction Temperature	T_j	+150	$^\circ C$
Storage Temperature	T_{stg}	-55~+150	$^\circ C$
Collector to Base Voltage	V_{CBO}	-20	V
Collector to Emitter Voltage	V_{CEO}	-10	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current (DC)	I_C	-2	A
Collector Current (Pulse)	I_C	-5	A
Base Current	I_B	-200	mA
Total Power Dissipation	P_D	1	W

Electrical Characteristics ($T_a = 25^\circ C$, unless otherwise stated)

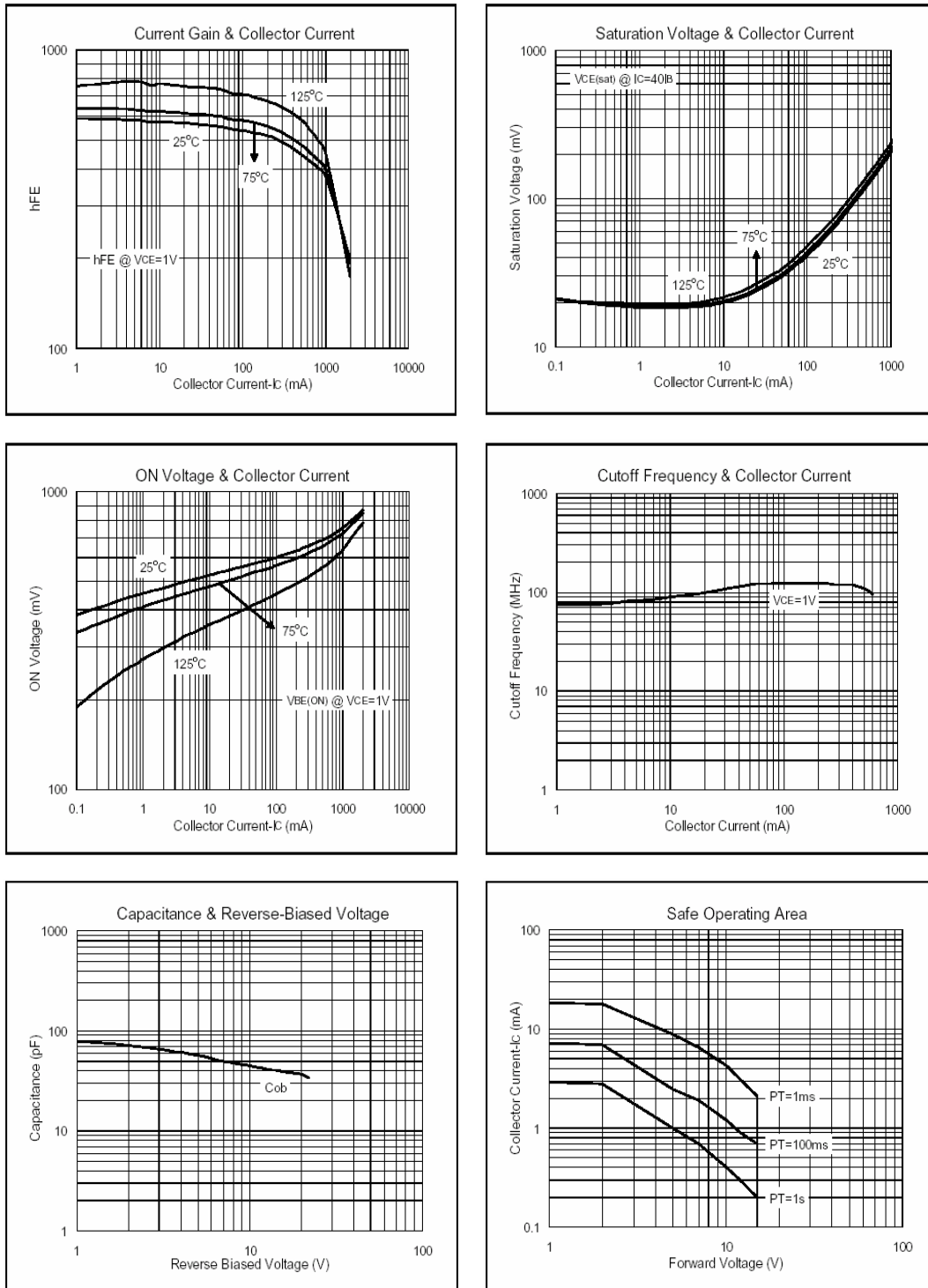
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	-20	-	-	V	$I_C=-100\mu A$, $I_E=0$
V_{CEO}	-10	-	-	V	$I_C=-10mA$, $I_B=0$
V_{EBO}	-6	-	-	V	$I_E=-1mA$, $I_C=0$
I_{CBO}	-	-	-100	nA	$V_{CB}=-20V$, $I_E=0$
I_{CES}	-	-	-100	nA	$V_{CES}=-20V$
I_{EBO}	-	-	-100	nA	$V_{EB}=-6V$, $I_C=0$
* $V_{CE(sat)}$	-	-0.3	-0.5	V	$I_C=-2A$, $I_B=-50mA$
* $V_{BE(on)}$	-	-0.83	-1.5	V	$V_{CE}=-1V$, $I_C=-2A$
* h_{FE1}	140	-	1000		$V_{CE}=-1V$, $I_C=-0.5A$
* h_{FE2}	60	-	-		$V_{CE}=-1V$, $I_C=-2A$
fT	-	140	-	MHz	$V_{CE}=-1V$, $I_C=-0.5A$, f=100MHz
Cob	-	50	-	pF	$V_{CB}=-10V$, $I_E=0$, f=1MHz

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

Classification Of h_{FE1}

Rank	Y	GR	BL	PE
Range	140 ~ 280	200 ~ 400	300 ~ 600	500 ~ 1000

Characteristics Curve



Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

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 Tsal-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165