

GM195

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

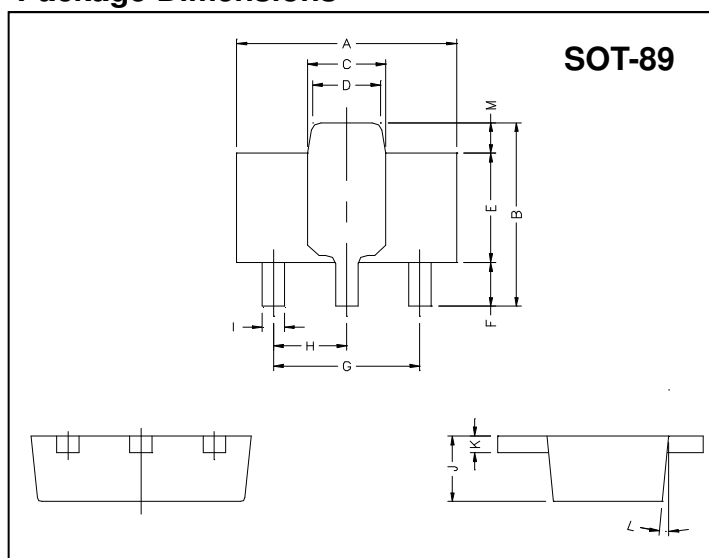
Description

The GM195 is designed for medium power amplifier applications.

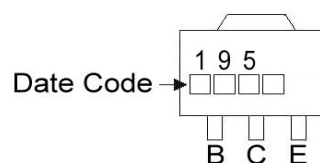
Features

- 60 Volt V_{CEO}
- 1 Amp continuous current
- Complementary to GM194

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 q TYP.	
			M	0.70 REF.	

Absolute Maximum Ratings at $T_a = 25$

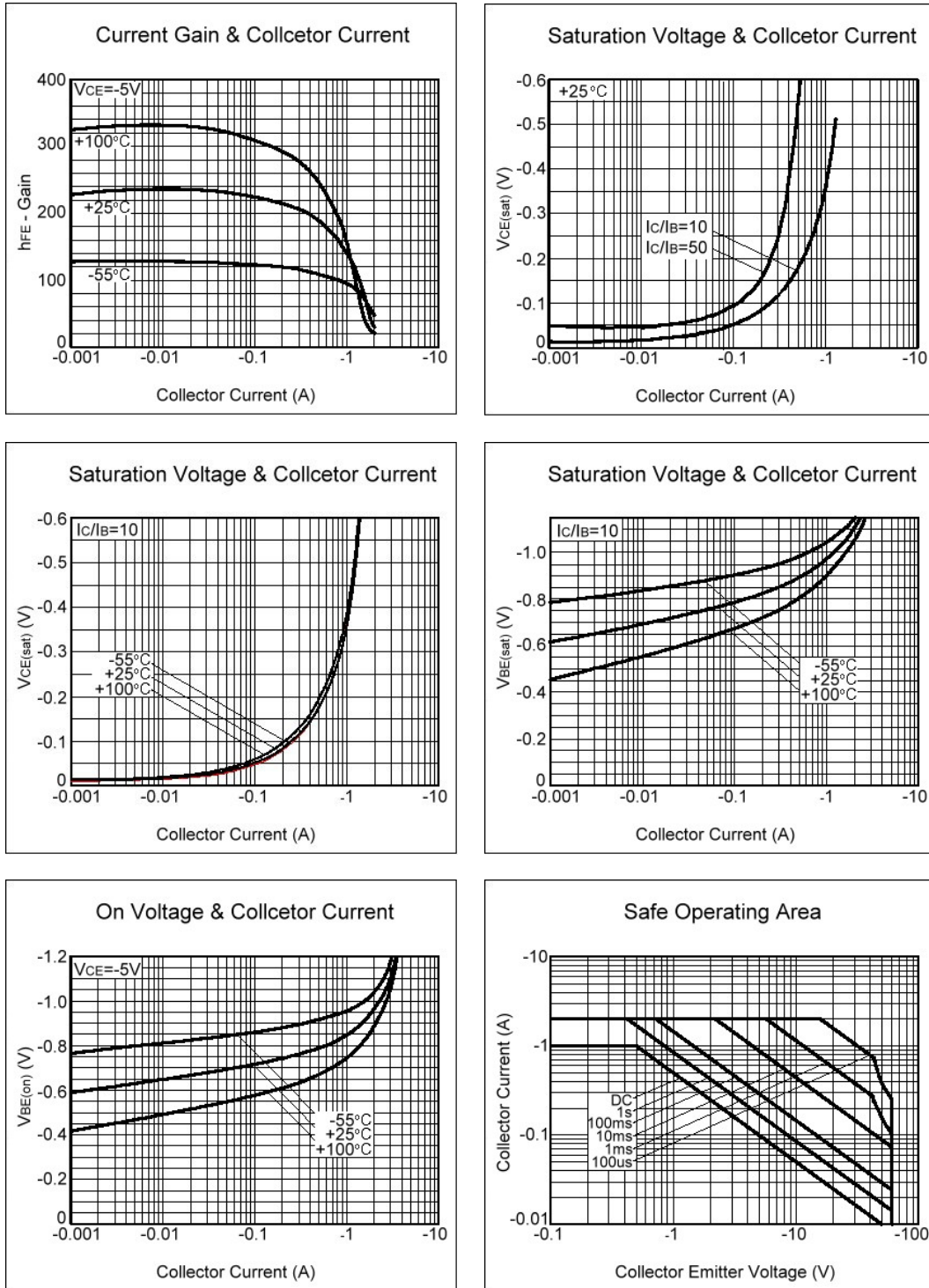
Parameter	Symbol	Ratings	Unit
Junction Temperature	T_j	+150	
Storage Temperature	T_{stg}	-55~+150	
Collector to Base Voltage	V_{CB0}	-80	V
Collector to Emitter Voltage	V_{CE0}	-60	V
Emitter to Base Voltage	V_{EB0}	-5	V
Collector Current (DC)	I_C	-1	A
Collector Current (Pulse)	I_C	-2	A
Base Current	I_B	-200	mA
Total Power Dissipation	P_D	1	W

Electrical Characteristics ($T_a = 25$; , unless otherwise stated)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CB0}	-80	-	-	V	$I_C = -100\mu A, I_E = 0$
* V_{CE0}	-60	-	-	V	$I_C = -10mA, I_B = 0$
V_{EB0}	-5	-	-	V	$I_E = -100\mu A, I_C = 0$
I_{CB0}	-	-	-100	nA	$V_{CB} = -60V, I_E = 0$
I_{CES}	-	-	-100	nA	$V_{CE} = -60V$
I_{EB0}	-	-	-100	nA	$V_{EB} = -4V, I_C = 0$
* $V_{CE(sat)1}$	-	-	-0.3	V	$I_C = -500mA, I_B = -50mA$
* $V_{CE(sat)2}$	-	-	-0.6	V	$I_C = -1A, I_B = -100mA$
* $V_{BE(sat)}$	-	-	-1.2	V	$I_C = -1A, I_B = -100mA$
* $V_{BE(on)}$	-	-	-1.0	V	$V_{CE} = -5V, I_C = -1A$
* h_{FE1}	100	-	-		$V_{CE} = -5V, I_C = -1mA$
* h_{FE2}	100	-	300		$V_{CE} = -5V, I_C = -500mA$
* h_{FE3}	80	-	-		$V_{CE} = -5V, I_C = -1A$
* h_{FE4}	15	-	-		$V_{CE} = -5V, I_C = -2A$
fT	150	-	-	MHz	$V_{CE} = -10V, I_C = -50mA, f = 100MHz$
Cob	-	-	10	pF	$V_{CB} = -10V, I_E = 0, f = 1MHz$

*Measured under pulse condition. Pulse width=300 μ s, Duty Cycle 2%

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