

GM195

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

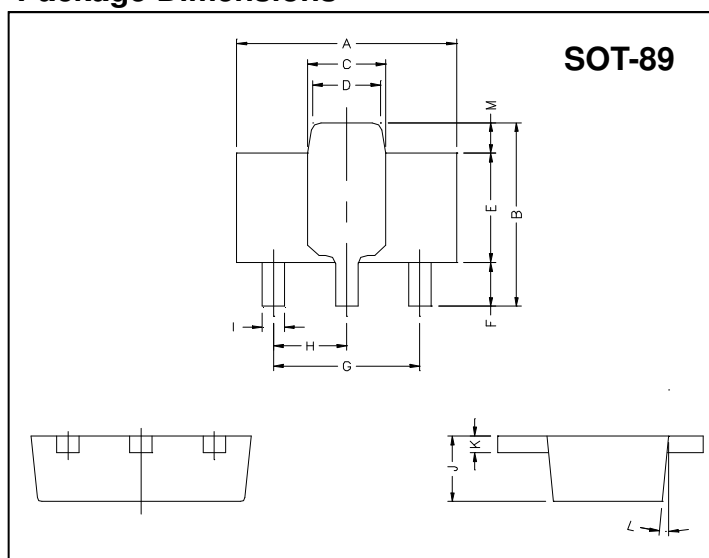
Description

The GM195 is designed for medium power amplifier applications.

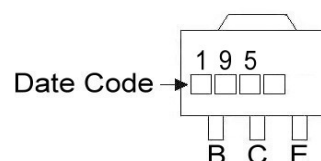
Features

- -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°	TYP.
			M	0.70	REF.

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

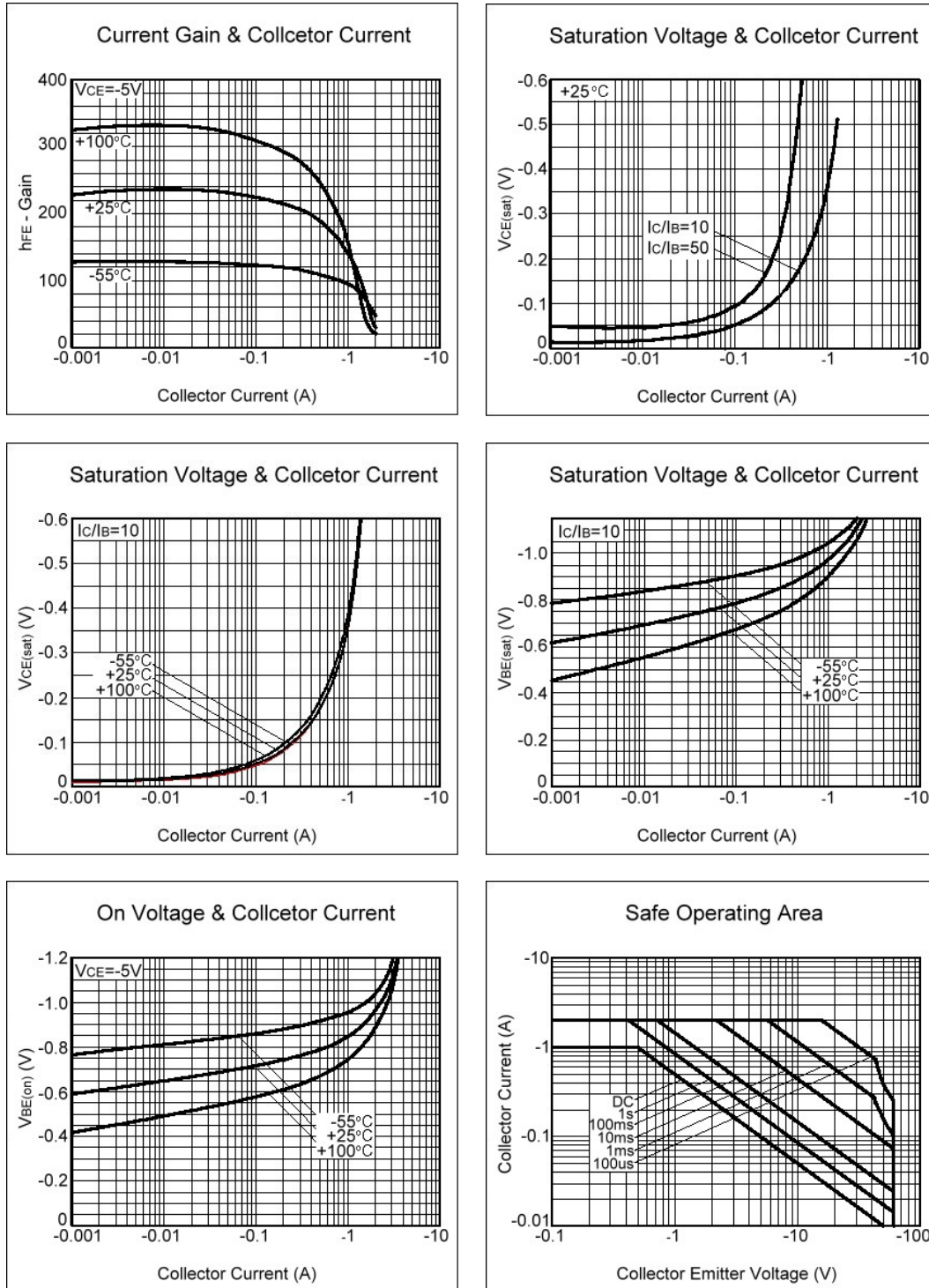
Parameter	Symbol	Ratings	Unit
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~+150	$^\circ\text{C}$
Collector to Base Voltage	V_{CB0}	-80	V
Collector to Emitter Voltage	V_{CE0}	-60	V
Emitter to Base Voltage	V_{EB0}	-5	V
Collector Current (DC)	I_C	-1	A
Collector Current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

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

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

**Measured under pulse condition. Pulse width=300 μs , Duty Cycle $\leq$ 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