

GMBCP56 NPN SILICON EPITAXIAL TRANSISTOR

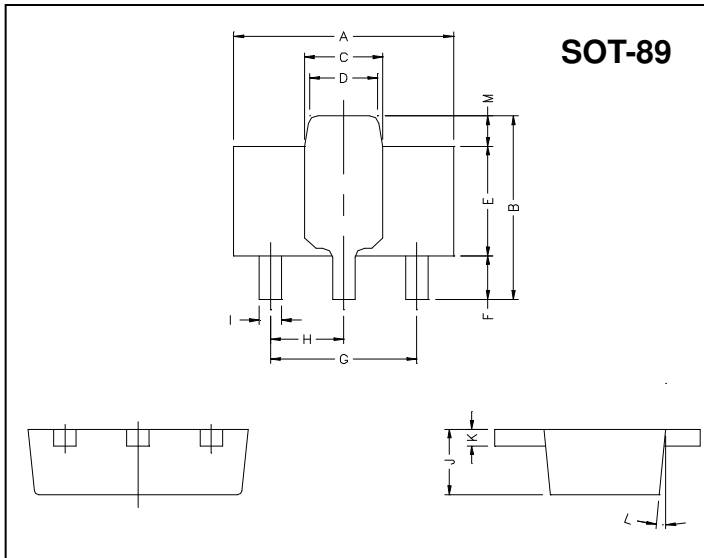
Description

The GMBCP56 is designed for use in audio amplifiers and medium power amplifications.

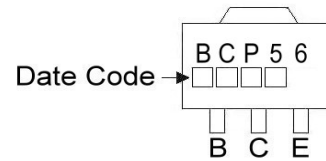
Features

- Collector-Emitter Voltage: $V_{CE0}=80V$
- Complementary to GMBCX53

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 Range	T_{STG}	-65 ~ +150	$^\circ C$
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5	V
Collect Current(DC)	I_C	1	A
Total Power Dissipation	P_D	1.2	W

Electrical Characteristics ($T_a = 25^\circ C$)

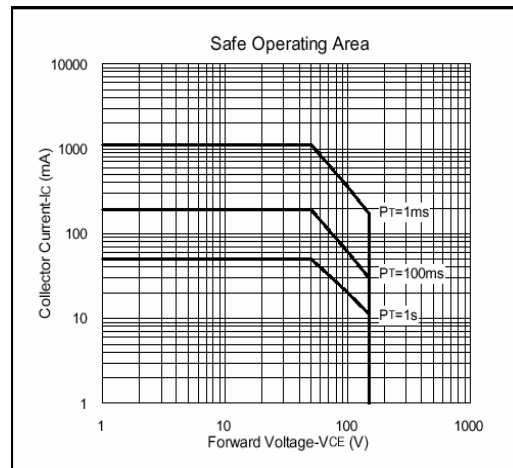
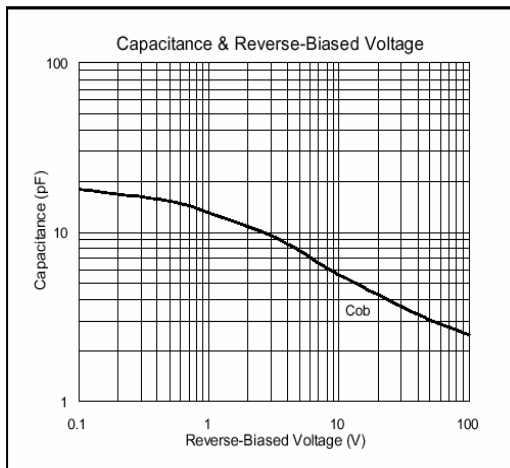
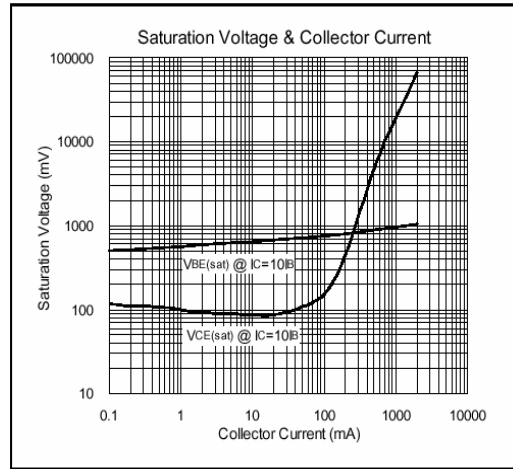
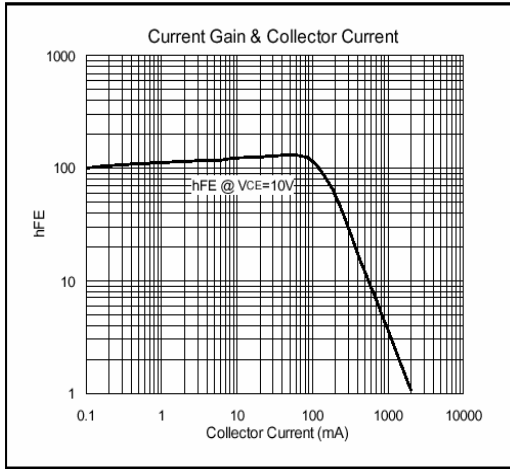
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	100	-	-	V	$I_C=100\mu A, I_E=0$
V_{CEO}	80	-	-	V	$I_C=1\text{ mA}, I_B=0$
V_{EBO}	5	-	-	V	$I_E=10\mu A, I_C=0$
I_{CBO}	-	-	100	nA	$V_{CB}=30V, I_E=0$
I_{EBO}	-	-	100	nA	$V_{EB}=5V, I_C=0$
* $V_{CE(sat)1}$	-	-	500	mV	$I_C=500\text{ mA}, I_B=50\text{ mA}$
* $V_{BE(on)}$	-	-	1000	mV	$I_C=500\text{ mA}, V_{CE}=2V,$
* h_{FE1}	63	-	-		$V_{CE}=2V, I_C=5\text{ mA}$
* h_{FE2}	63	-	250		$V_{CE}=2V, I_C=150\text{ mA}$
* h_{FE3}	40	-	-		$V_{CE}=2V, I_C=500\text{ mA}$
f_T	100	-	-	MHz	$V_{CE}=5V, I_C=10\text{ mA}$

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

Classification Of h_{FE2}

Rank	10	16
Range	63 - 160	100 - 250

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