

## GMBCP56 NPN SILICON EPITAXIAL TRANSISTOR

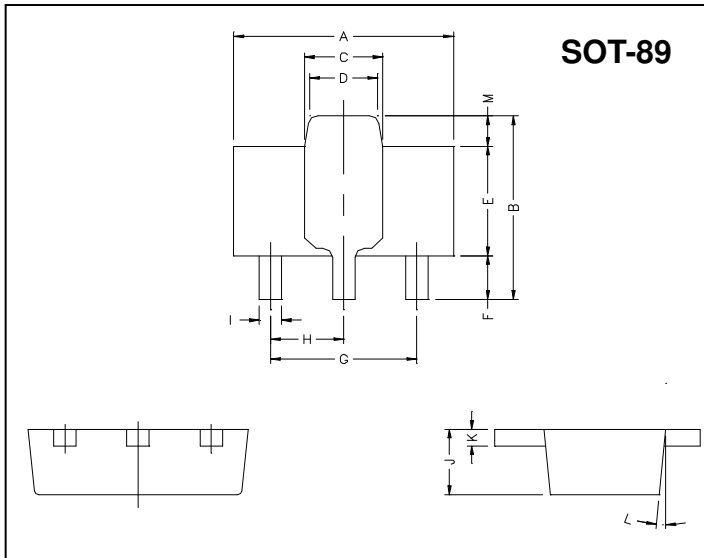
### Description

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

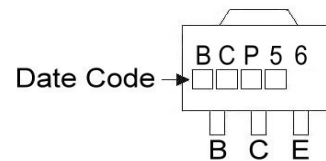
### Features

- 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 ( $T_a = 25^\circ C$ )

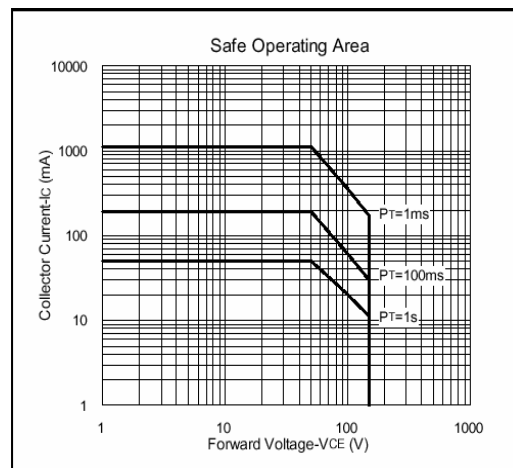
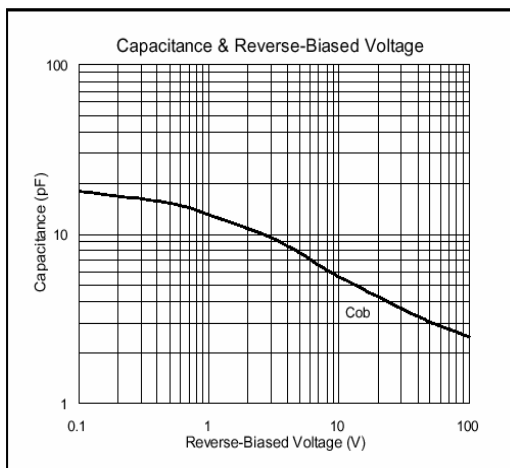
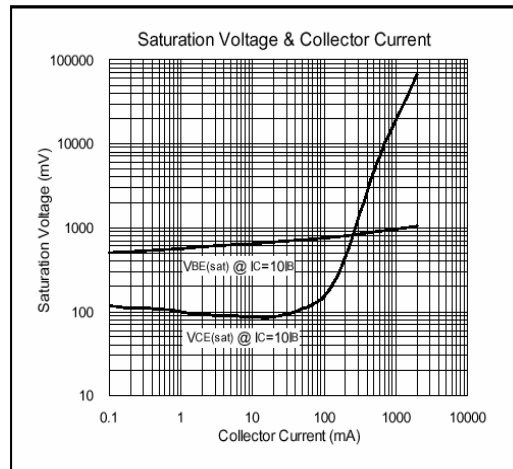
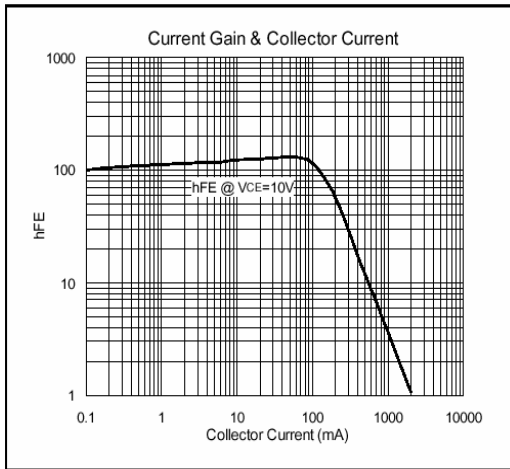
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
$V_{CBO}$	100	-	-	V	$I_C=100\mu A, I_E=0$
$V_{CEO}$	80	-	-	V	$I_C=1mA, I_B=0$
$V_{EBO}$	5	-	-	V	$I_E=10\mu A, I_C=0$
$I_{CBO}$	-	-	100	nA	$V_{CB}=30V, I_E=0$
$I_{EBO}$	-	-	100	nA	$V_{EB}=5V, I_C=0$
* $V_{CE(sat)1}$	-	-	500	mV	$I_C=500mA, I_B=50mA$
* $V_{BE(on)}$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

\* 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



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