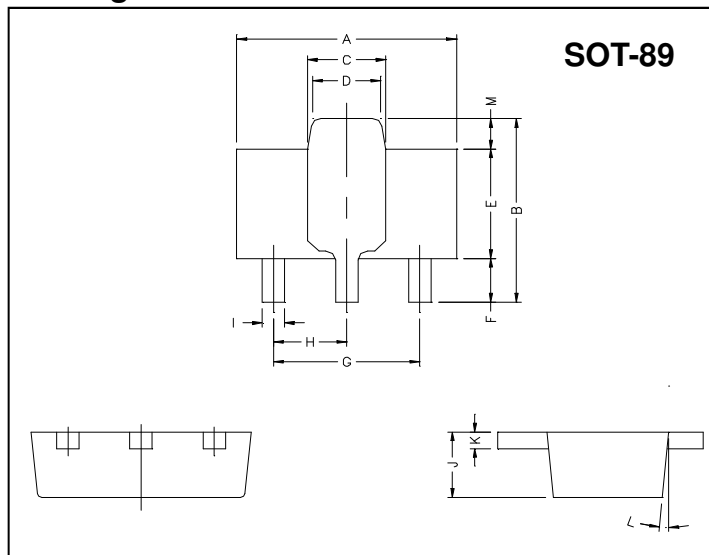


GM649A PNP EPITAXIAL PLANAR TRANSISTOR

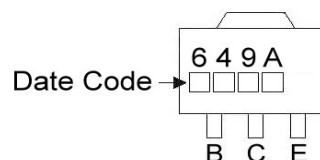
Description

The GM469A is designed for low frequency power amplifier complementary pair with GM669A.

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 TA = 25°C

Parameter	Symbol	Ratings	Unit
Junction Temperature	T _j	+150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C
Collector to Base Voltage	V _{CB0}	-180	V
Collector to Emitter Voltage	V _{CEO}	-160	V
Emitter to Base Voltage	V _{EBO}	-5	V
Collect Current(DC)	I _C	-1.5	A
Collect Current(Pulse)	I _C	-3	A
Total Power Dissipation	P _D	1	W

Electrical Characteristics(TA = 25°C)

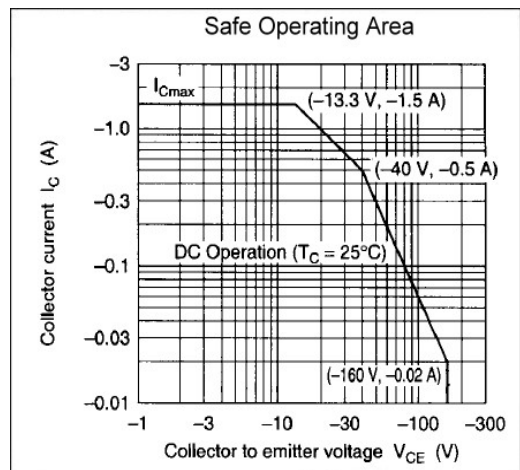
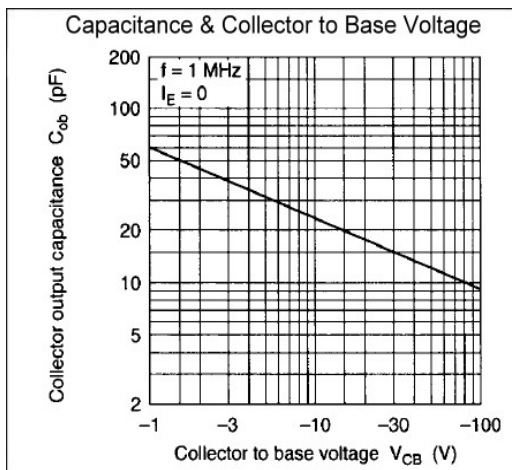
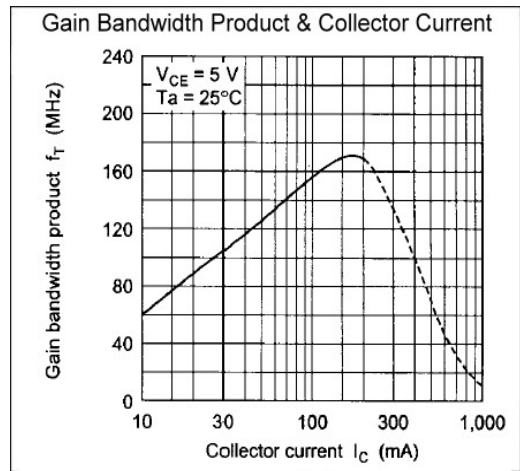
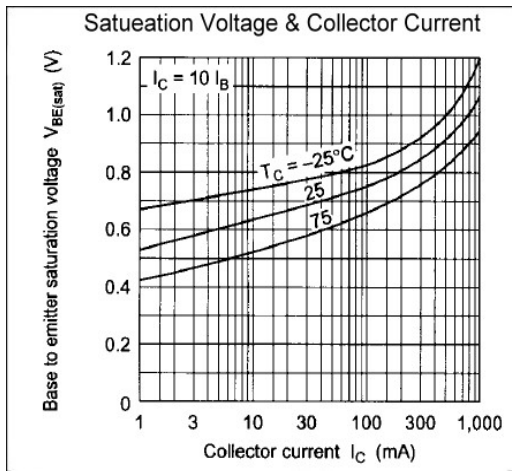
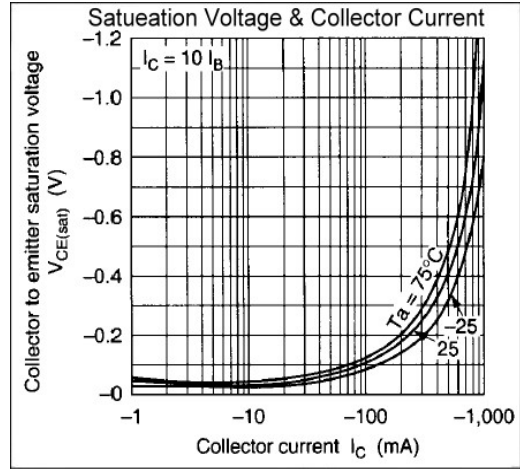
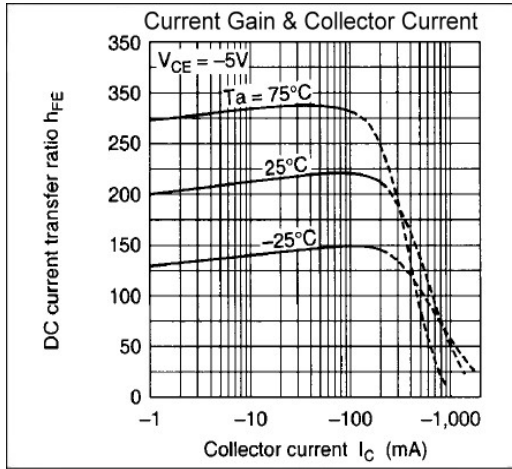
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V _{CB0}	-180	-	-	V	I _C =-1mA, I _E =0
V _{CEO}	-160	-	-	V	I _C =-10mA, I _B =0
V _{EBO}	-5	-	-	V	I _E =-1mA, I _C =0
I _{CB0}	-	-	-10	uA	V _{CB} =-160V, I _E =0
*V _{CE(sat)}	-	-	-1	V	I _C =-600mA, I _B =-50mA
*V _{BE(on)}	-	-	-1.5	V	V _{CE} =-5V, I _C =-150mA
*h _{FE1}	60	-	200		V _{CE} =-5V, I _C =-150mA
*h _{FE2}	30	-	-		V _{CE} =-5V, I _C =-500mA
f _T	-	140	-	MHz	V _{CE} =-5V, I _C =-150mA, f=100MHz
C _{ob}	-	27	-	pF	V _{CB} =-10V, f=1MHz

* Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification Of h_{FE1}

Rank	B	C
h _{FE1}	60 ~ 120	100 ~ 200

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