

GTM CORPORATION

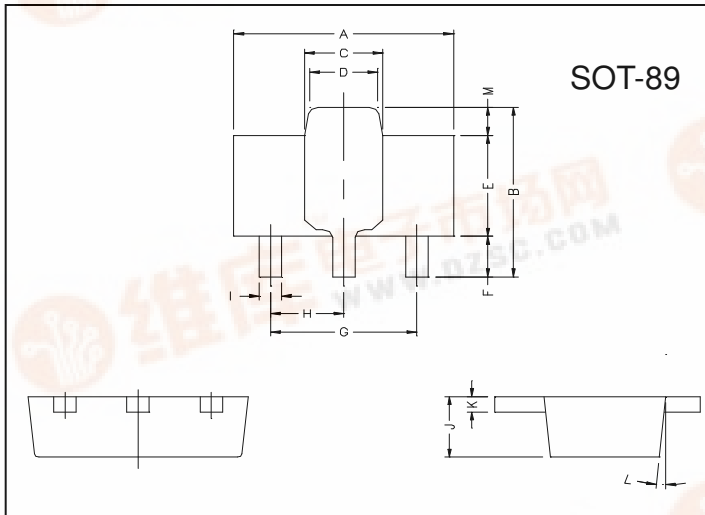
ISSUED DATE :2004/08/02
REVISED DATE :

GM1616A NPN EPITAXIAL PLANAR TRANSISTOR

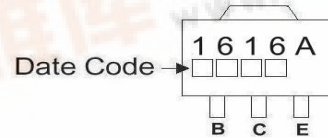
Description

The GM1616A is designed for audio frequency power amplifier and medium speed switching.

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 Ta = 25°C

Parameter		Ratings	Unit
Collector to Base Voltage	VCBO	120	V
Collector to Emitter Voltage	VCEO	60	V
Emitter to Base Voltage	VEBO	6	V
Collect Current(DC)	IC	1	A
Collect Current*(Pulse)	IC	2	A
Junction Temperature	Tj	+150	°C
Storage Temperature Range	TSTG	-55 ~ +150	°C
Total Power Dissipation	PD	750	mW

Characteristics at Ta = 25°C

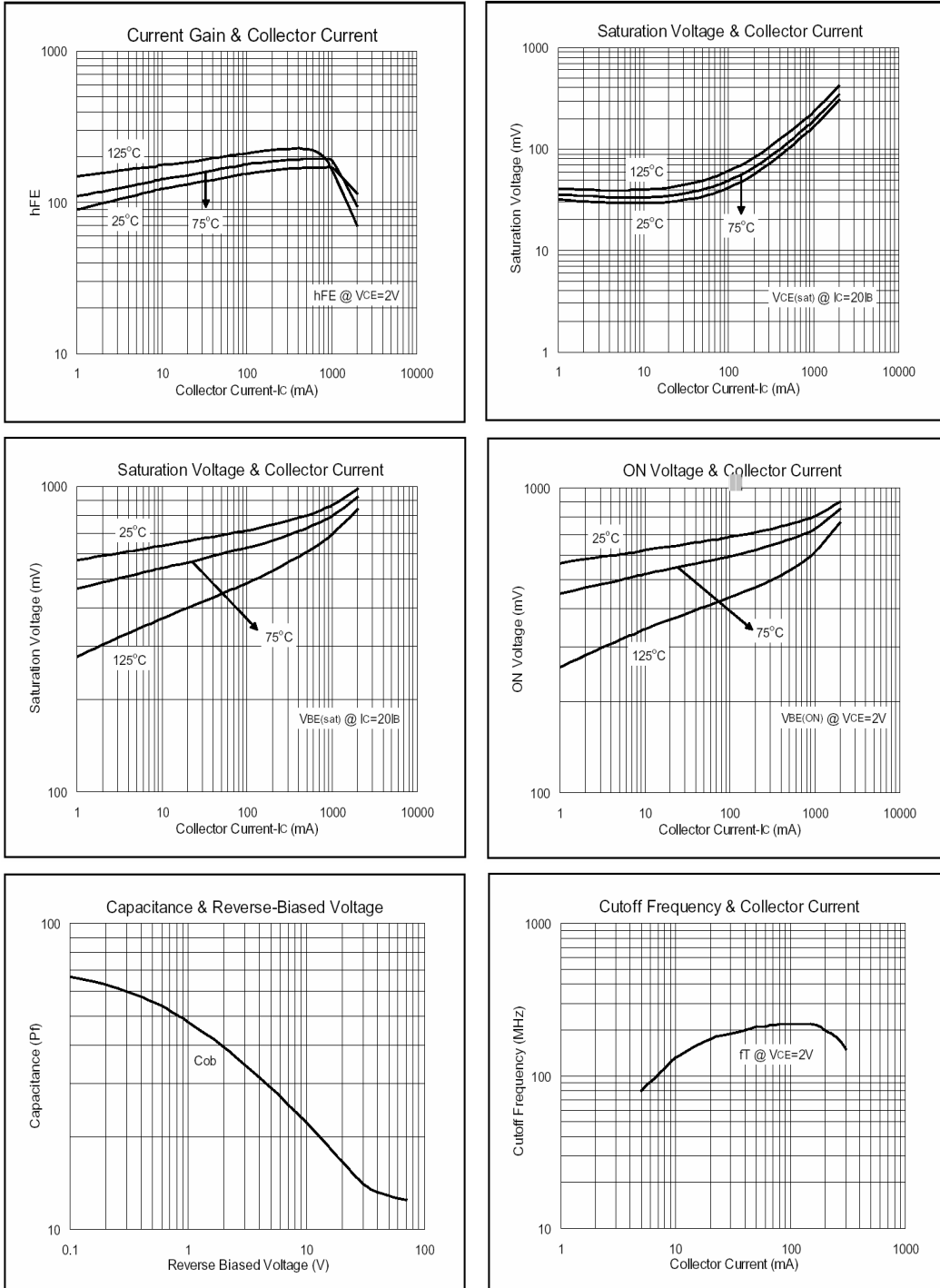
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	120	-	-	V	I _C =100uA
BV _{CEO}	60	-	-	V	I _C =1mA
BV _{EBO}	6	-	-	V	I _E =10uA
I _{CBO}	-	-	100	nA	V _{BE} =60V
I _{EBO}	-	-	100	nA	V _{BE} =6V
*V _{CE(sat)}	-	150	300	mV	I _C =1A, I _B =50mA
*V _{BE(sat)}	-	0.9	1.2	mV	I _C =1A, I _B =50mA
V _{BE(on)}	600	640	700	mV	V _{CE} =2V, I _C =50mA
*h _{FE1}	135	-	600		V _{CE} =2V, I _C =100mA
*h _{FE2}	81	-	-		V _{CE} =2V, I _C =1A
f _T	100	160	-	MHz	V _{CE} =2V, I _C =100mA
C _{ob}	-	-	19	pF	V _{CB} =10V, I _E =0, f=1MHz
t _{on}	-	0.07	-	uS	V _{CE} =10V, I _C =100mA
t _s	-	0.95	-	uS	I _{B1} =-I _{B2} =10mA
t _f	-	0.07	-	uS	V _{BE(off)} =2~-3V

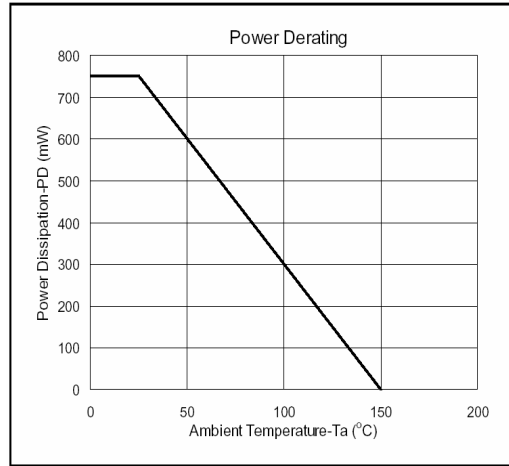
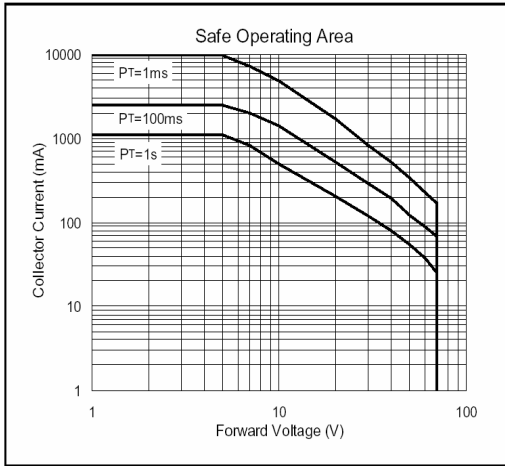
Classificaton of hFE1

*Pulse Test : Pulse Width <=380us, Duty Cycle <=2%

Rank	Y	G	L
Range	135-270	200-400	300-600

Characteristics Curve





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