

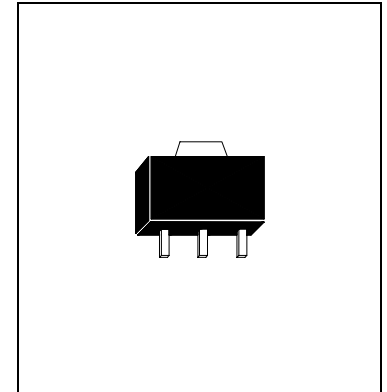


# HM3669

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HM3669 is designed for using in power amplifier applications, power switching application.



## Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures  
Tstg Storage Temperature ..... -55 ~ +150 °C  
Tj Junction Temperature ..... +150 °C
- Maximum Power Dissipation  
Total Power Dissipation (Ta=25°C) ..... 1 W
- Maximum Voltages and Currents  
BVCBO Collector to Base Breakdown Voltage ..... 80 V  
BVCEO Collector to Emitter Breakdown Voltage ..... 80 V  
BVEBO Emitter to Base Emitter Breakdown Voltage ..... 5 V  
IC Collector Current (DC)..... 2 A

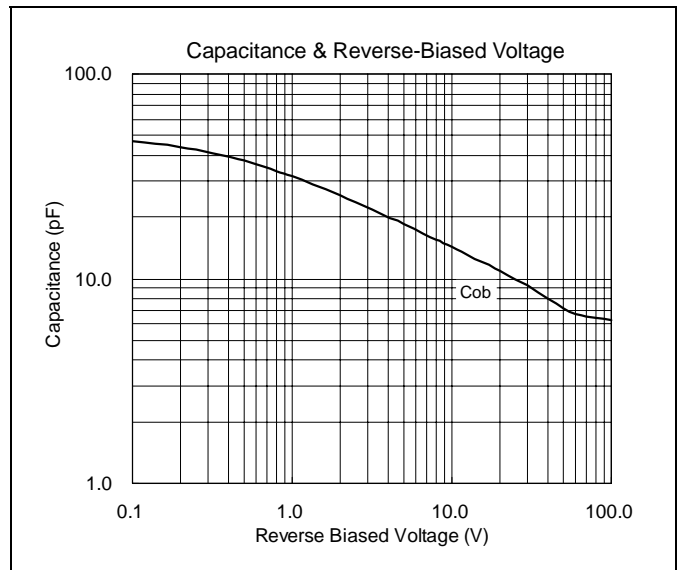
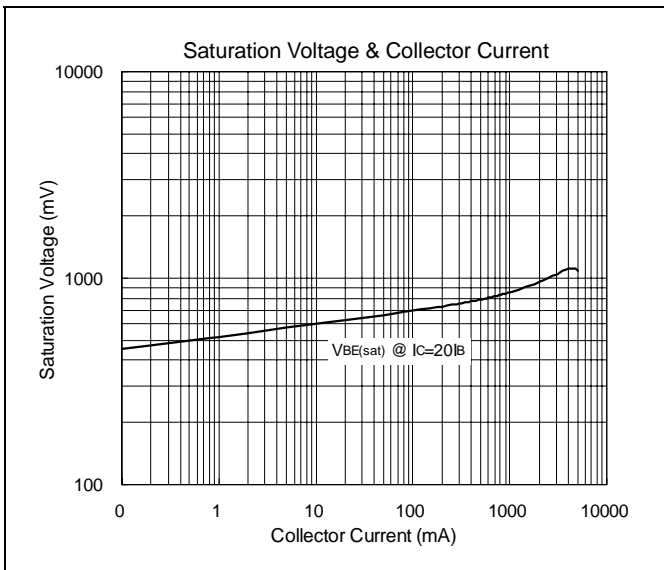
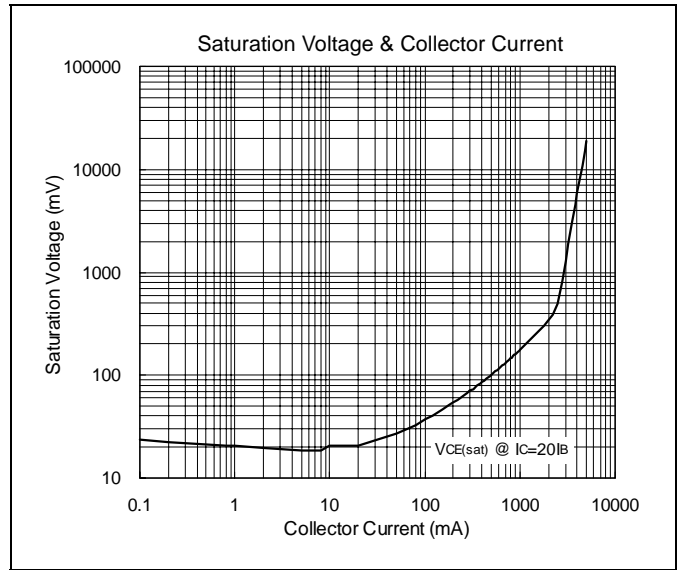
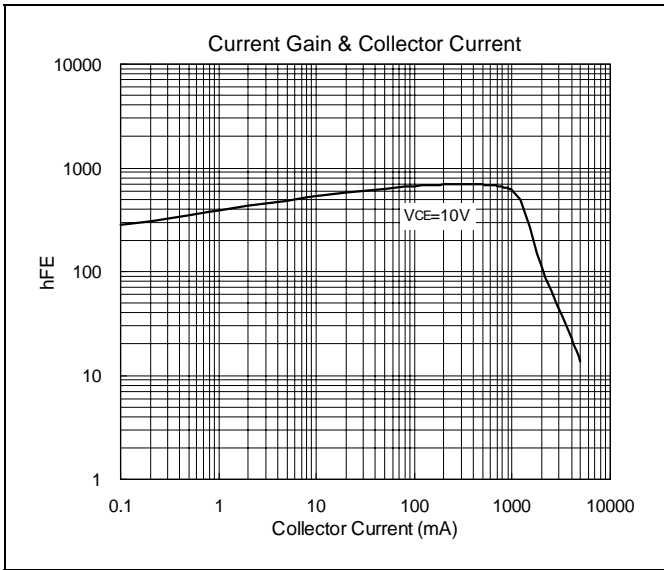
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	80	-	-	V	IC=100uA
BVCEO	80	-	-	V	IC=10mA
BVEBO	5	-	-	V	IE=100uA
ICBO	-	-	1000	nA	VCB=80V
IEBO	-	-	1000	nA	VEB=5V
*VCE(sat)	-	0.15	0.5	V	IC=1A, IB=50mA
*VBE(sat)	-	0.9	1.2	V	IC=1A, IB=50mA
*hFE	300	-	-		VCE=2V, IC=500mA
fT	-	100	-	MHz	VCE=2V, IC=500mA
Cob	-	30	-	pF	VCB=10V, f=1MHz
Ton	-	0.2	-	uS	IB1=-IB2=50mA, Duty Cycle 1%
Tstg	-	1	-	uS	
Tf	-	0.2	-	uS	

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



### Characteristics Curve





### SOT-89 Dimension

**Marking :**

Style : Pin 1.Base 2.Collector 3.Emitter

3-Lead SOT-89 Plastic Surface Mounted Package  
 HSMC Package Code : M

\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0583	0.0598	1.48	1.52
B	0.1594	0.1673	4.05	4.25	G	0.1165	0.1197	2.96	3.04
C	0.0591	0.0663	1.50	1.70	H	0.0551	0.0630	1.40	1.60
D	0.0945	0.1024	2.40	2.60	I	0.0138	0.0161	0.35	0.41
E	0.0141	0.0201	0.36	0.51					

**Notes :** 1.Dimension and tolerance based on our Spec. dated May. 05,1996.  
 2.Controlling dimension : millimeters.  
 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

**Material :**

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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