

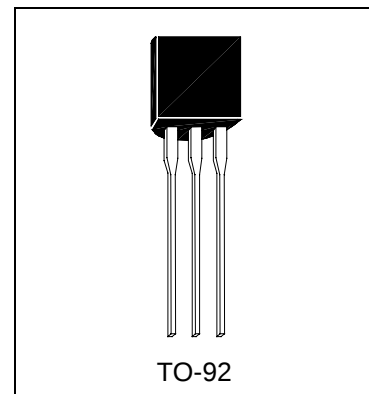


HA3669

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HA3669 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) 750 mW
- Maximum Voltages and Currents
 - BVCBO Collector to Base Breakdown Voltage 80 V
 - BVCEO Collector to Emitter Breakdown Voltage 80 V
 - BVEBO Emitter to Base Breakdown Voltage 5 V
 - IC Collector Current (DC) 2 A

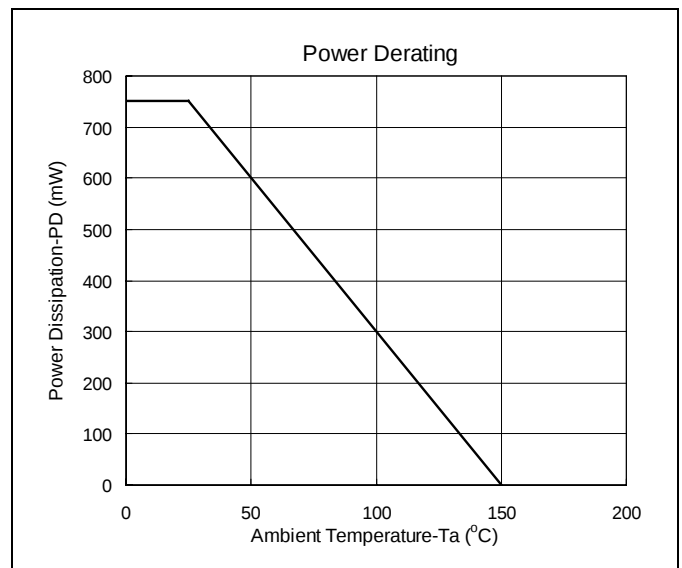
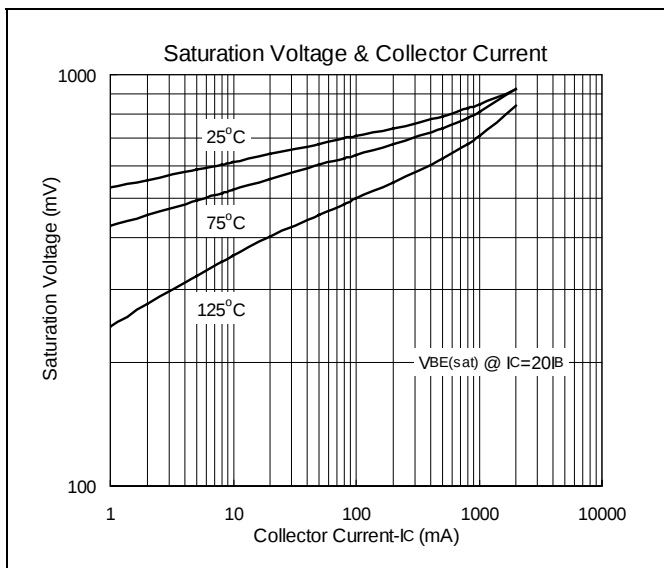
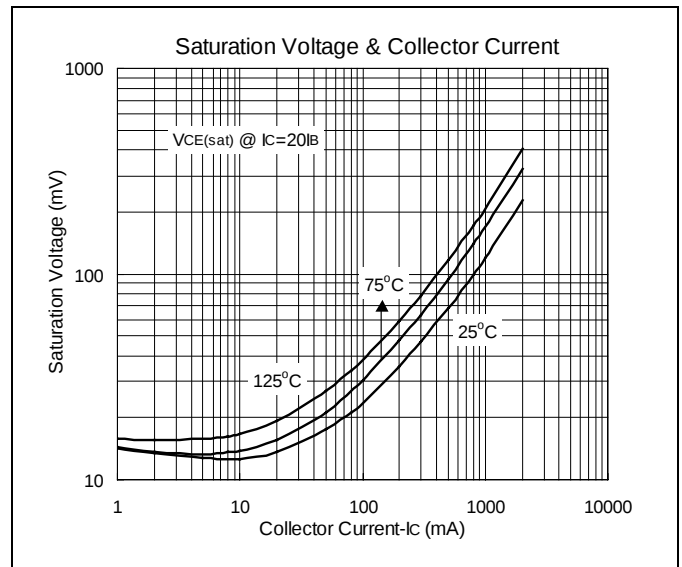
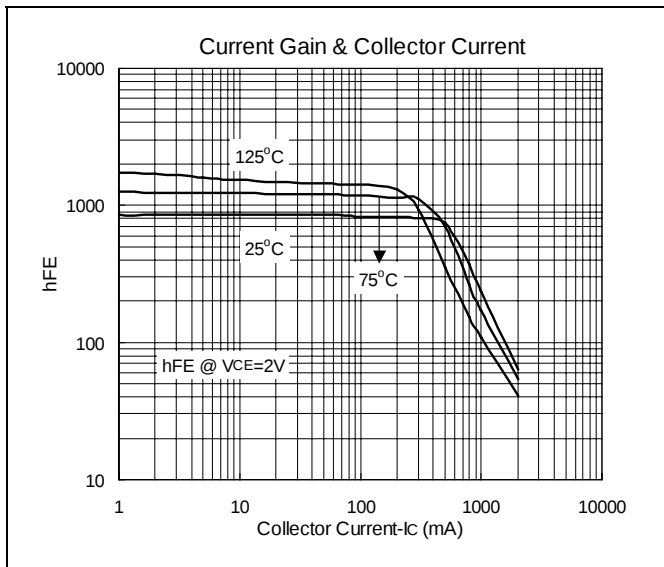
Characteristics (Ta=25°C)

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	240	-	-		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	-	1.0	-	uS	
Tf	-	0.2	-	uS	

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

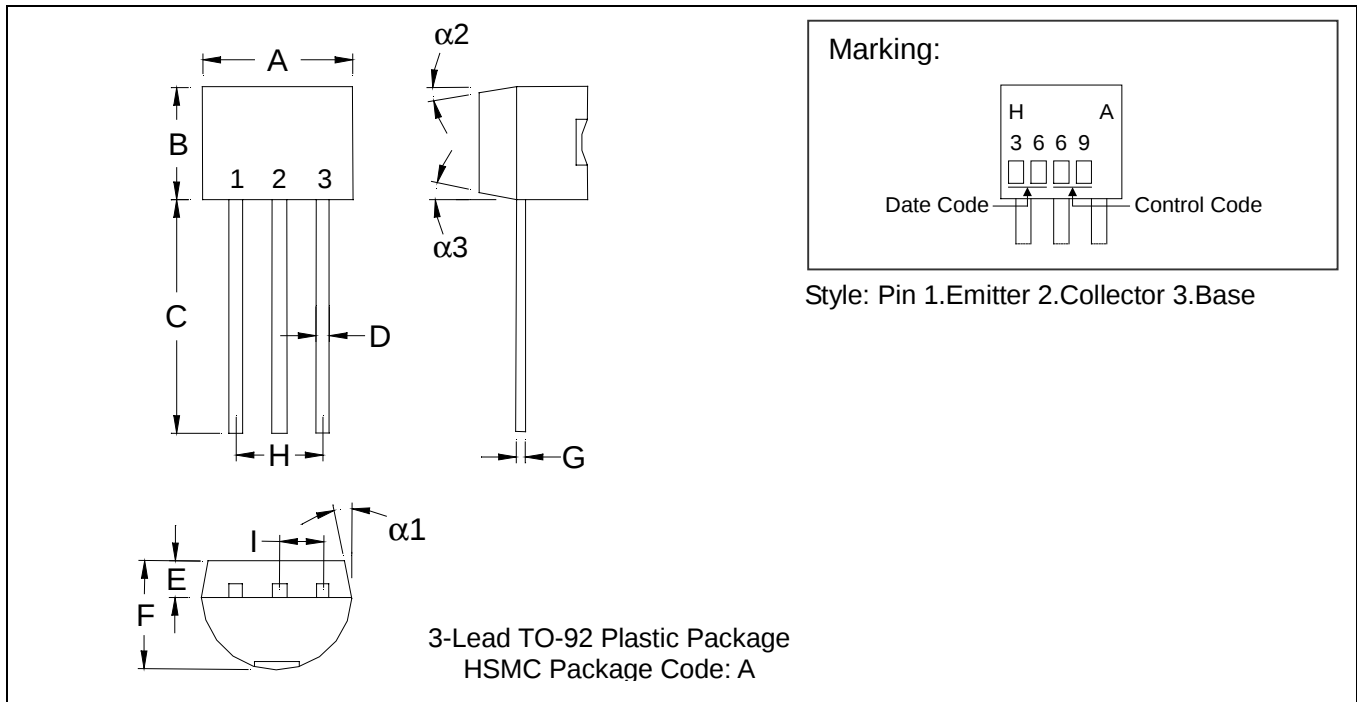


Characteristics Curve





TO-92 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*2°	-	*2°

Notes: 1.Dimension and tolerance based on our Spec. dated Apr. 25,1996.
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

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory:

- Head Office** (Hi-Sincerity Microelectronics Corp.): 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
Tel: 886-2-25212056 Fax: 886-2-25632712, 25368454
- Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
Tel: 886-3-5983621~5 Fax: 886-3-5982931