



HM965

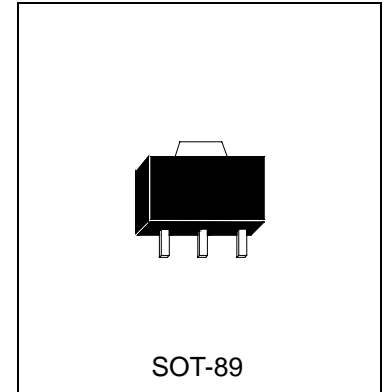
NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HM965 is designed for use as AF output amplifier and glass unit.

Features

- Low VCE(sat)
- High performance at low supply voltage



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 1.2 W
- Maximum Voltages and Currents (Ta=25°C)
BVCBO Collector to Base Voltage 40 V
BVCEO Collector to Emitter Voltage 20 V
BVEBO Emitter to Base Voltage 7 V
IC Collector Current (Continuous) 5 A
IC Collector Current (Peak PT=10mS) 8 A

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA
BVCEO	20	-	-	V	IC=1mA
BVEBO	7	-	-	V	IE=10uA
ICBO	-	-	0.1	uA	VCB=10V
IEBO	-	-	0.1	uA	VEB=7V
*VCE(sat)	-	0.35	1	V	IC=3A, IB=0.1A
*hFE1	340	-	800		VCE=2V, IC=0.5A
*hFE2	150	-	-		VCE=2V, IC=2A
fT	-	150	-	MHz	VCE=6V, IE=50mA
Cob	-	-	50	pF	VCB=20V, f=1MHz

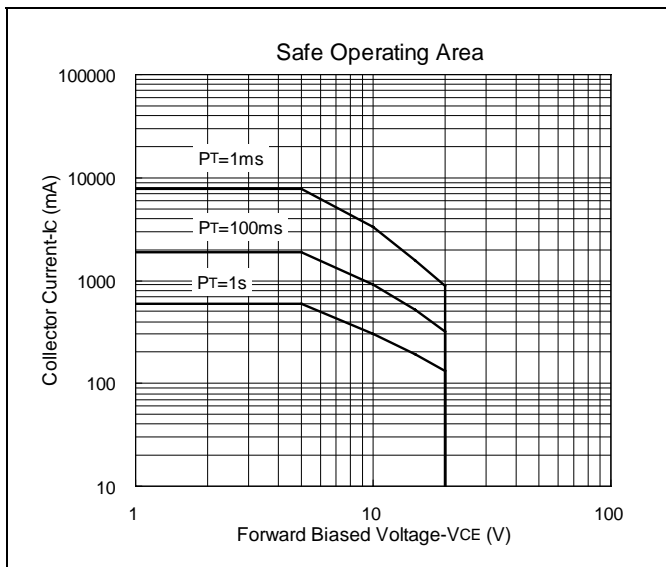
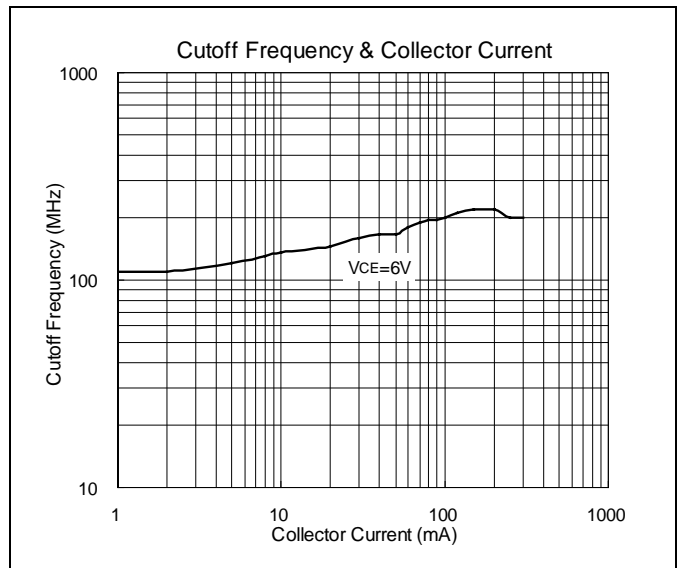
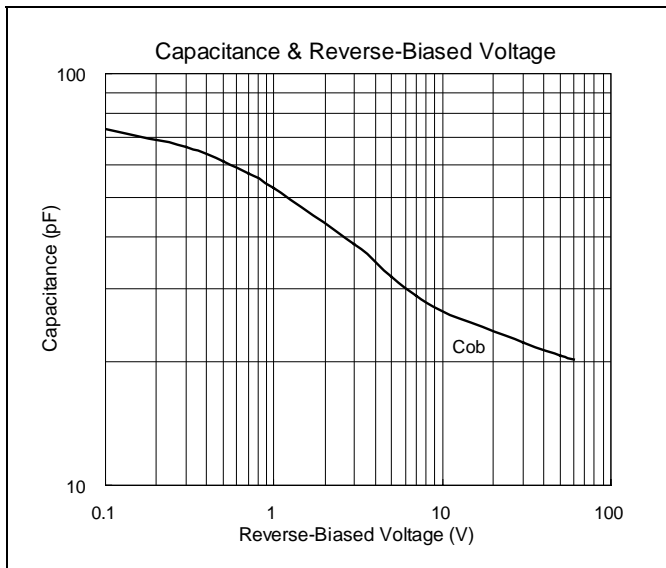
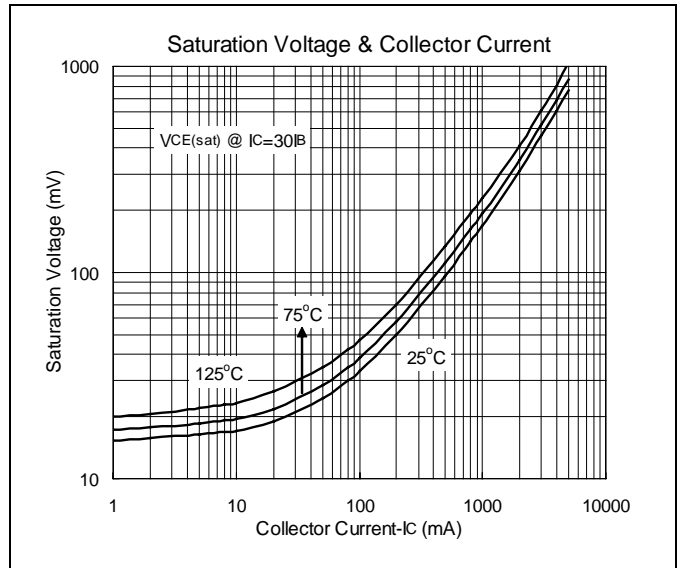
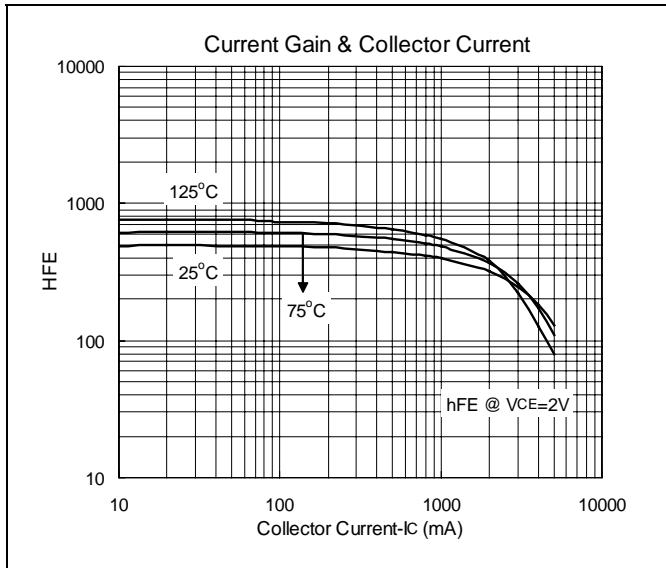
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Classifications Of hFE1

Rank	R	S
Range	340-600	560-800

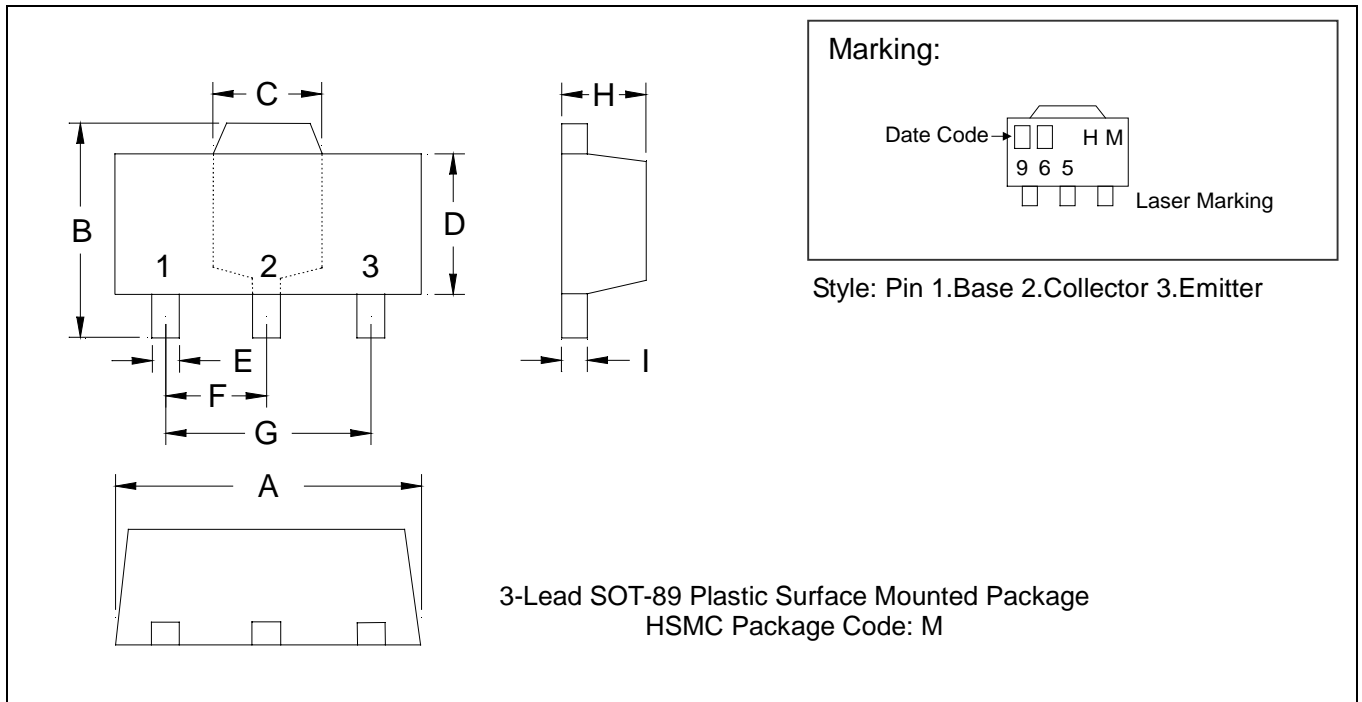


Characteristics Curve





SOT-89 Dimension



*: 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

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