



# HE9018

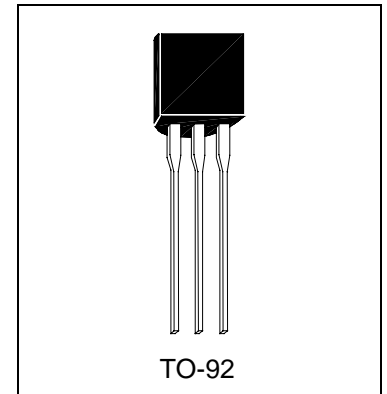
NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HE9018 is designed for use in AM/FM if amplifier and local oscillator of FM/VHF tuner.

## Absolute Maximum Ratings

- Maximum Temperatures  
 Storage Temperature ..... -55 °C +150 °C  
 Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation  
 Total Power Dissipation (Ta=25°C) ..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)  
 VCB0 Collector to Base Voltage ..... 30 V  
 VCEO Collector to Emitter Voltage ..... 15 V  
 VEBO Emitter to Base Voltage ..... 5 V  
 IC Collector Current ..... 50 mA  
 IB Base Current ..... 10 mA



## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	IC=100uA
BVCEO	15	-	-	V	IC=1mA
BVEBO	5	-	-	V	IE=100uA
ICBO	-	-	50	nA	VCB=12V
*VCE(sat)	-	-	0.5	V	IC=10mA, IB=1mA
*hFE	39	-	198		VCE=5V, IC=1mA
fT	700	1100	-	MHz	VCE=5V, IC=5mA
Cob	-	1.3	1.7	pF	VCB=10V, IE=0

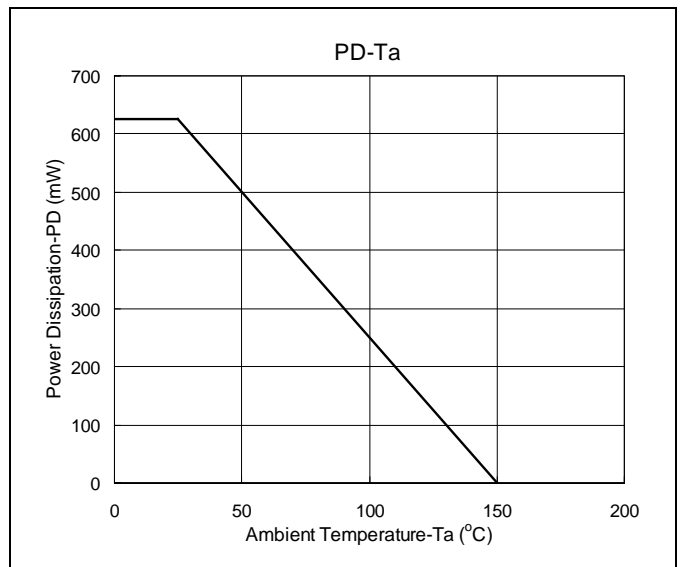
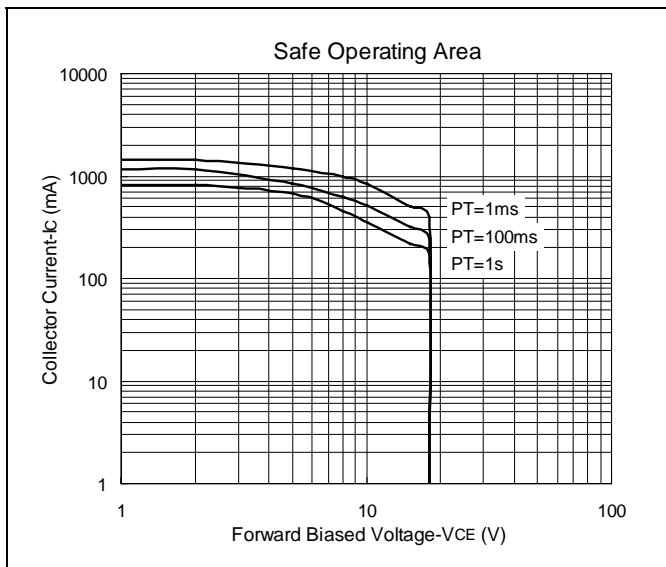
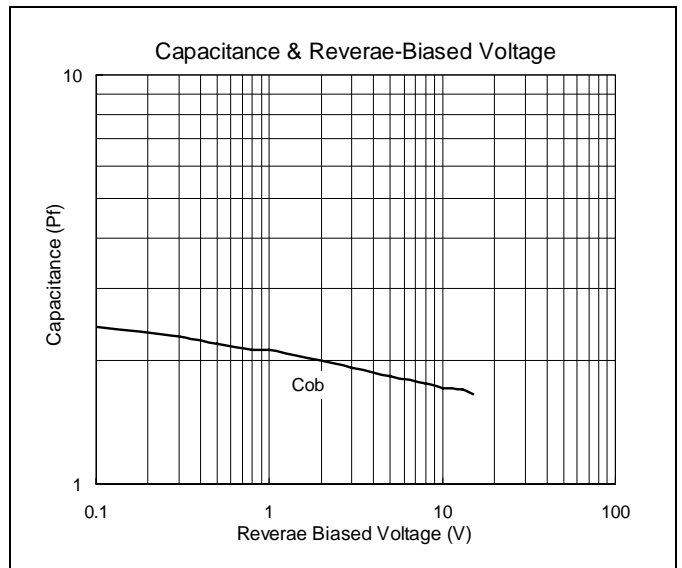
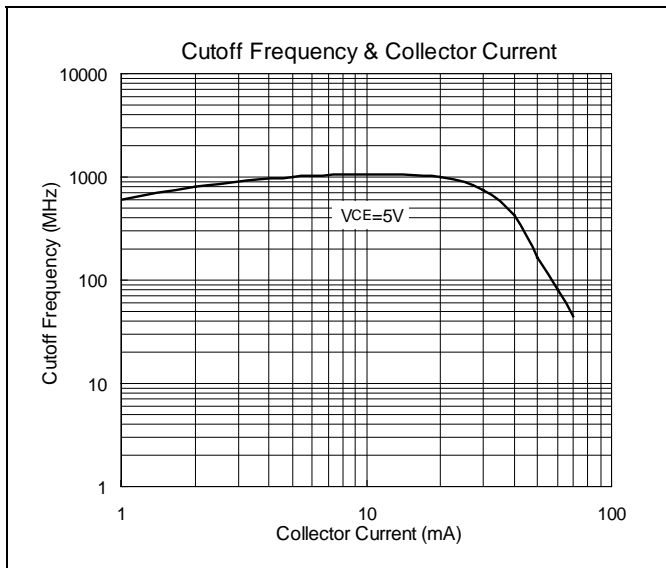
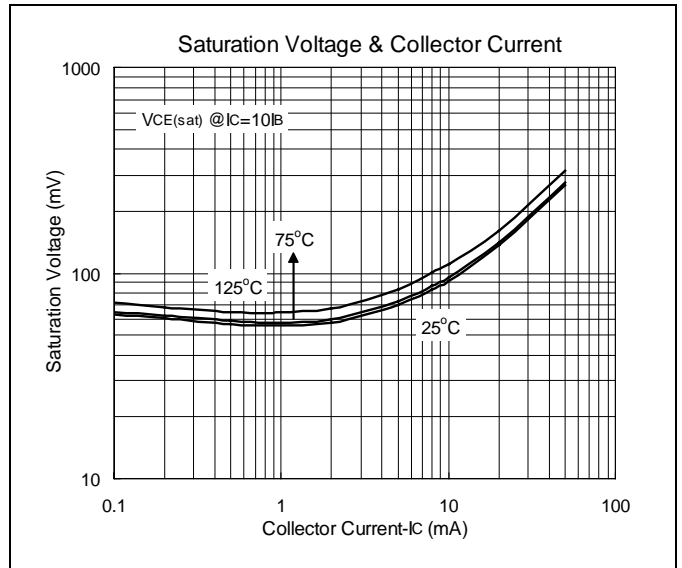
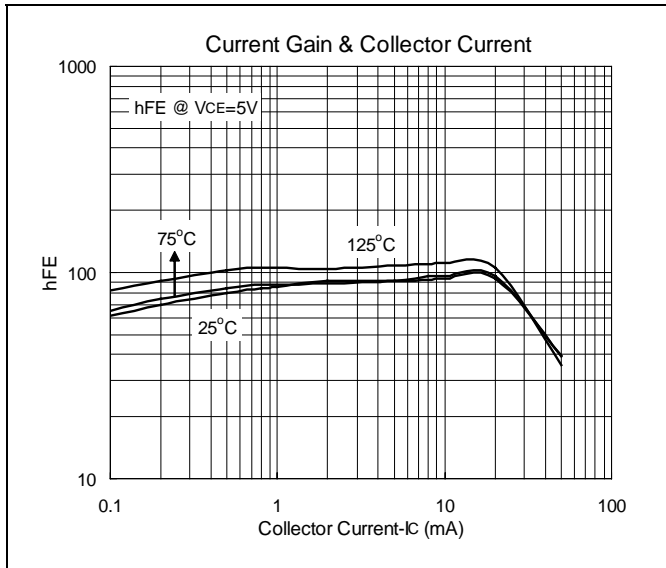
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

## Classification on hFE

Rank	E	F	G	H	I
Range	39-60	54-80	72-108	97-146	132-198

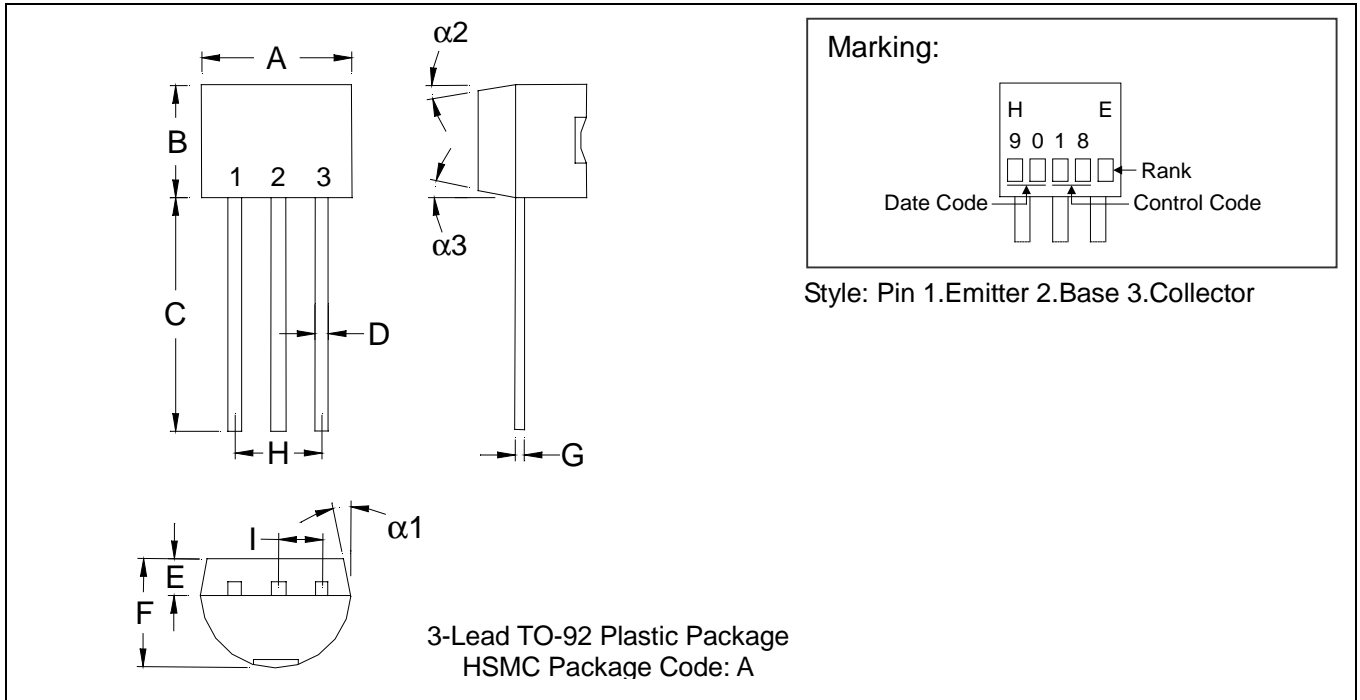


### Characteristics Curve





### 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	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*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

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**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