

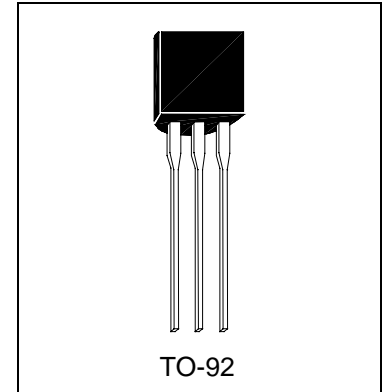


HE9018

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

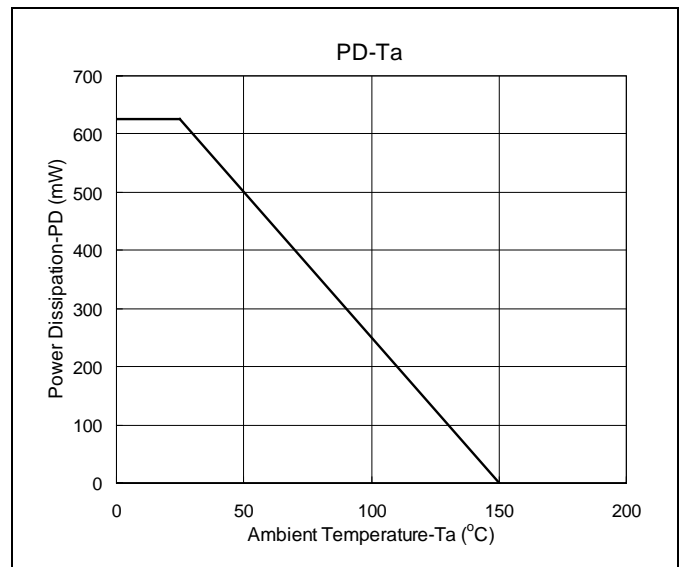
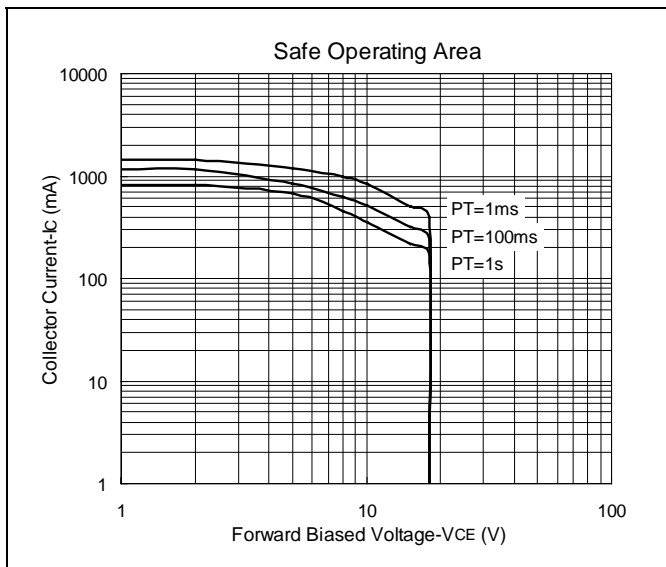
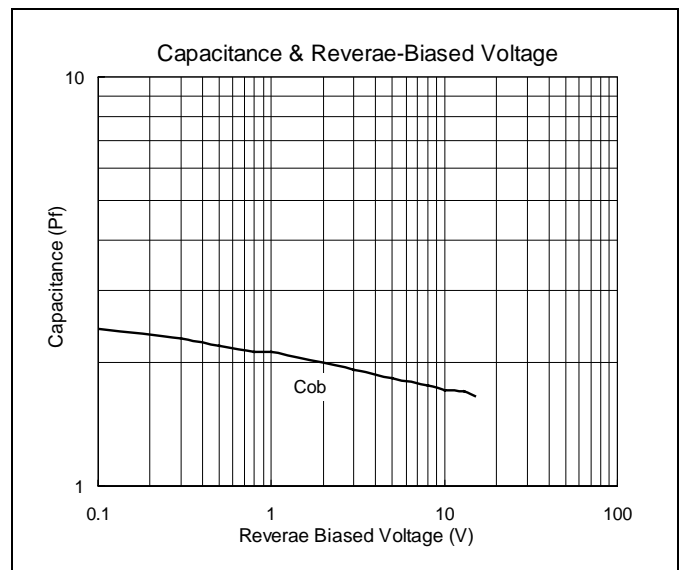
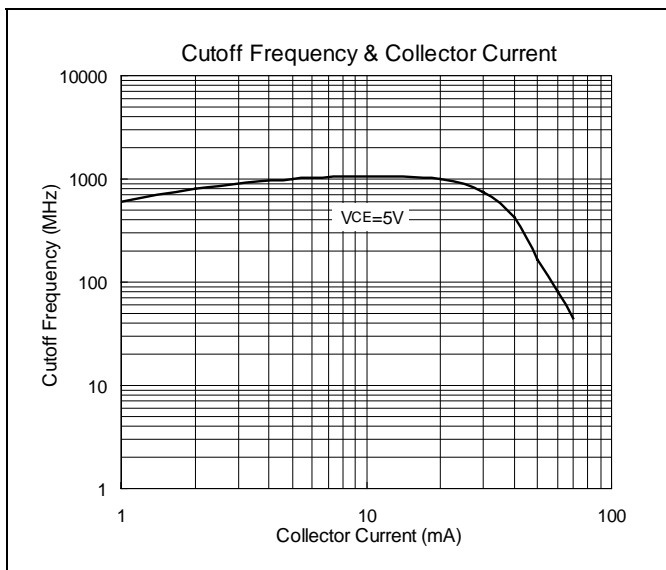
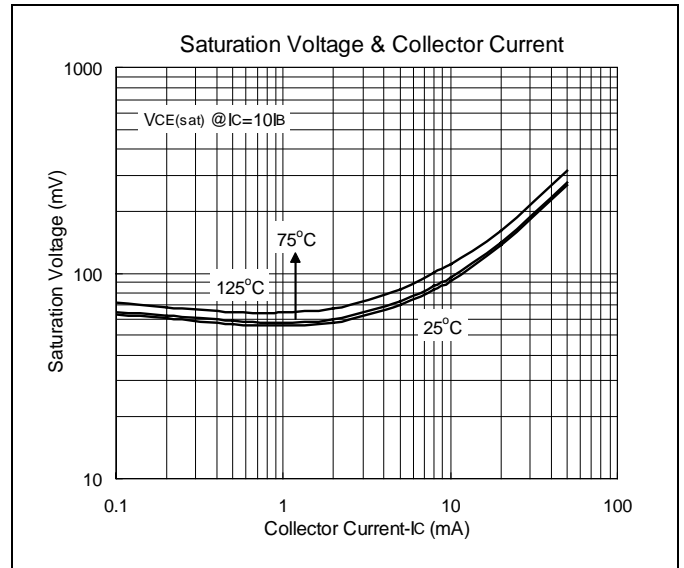
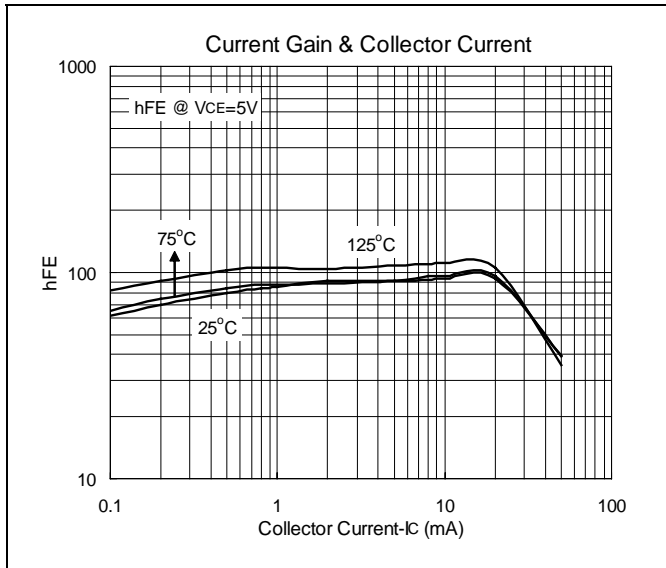
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Classification on hFE

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

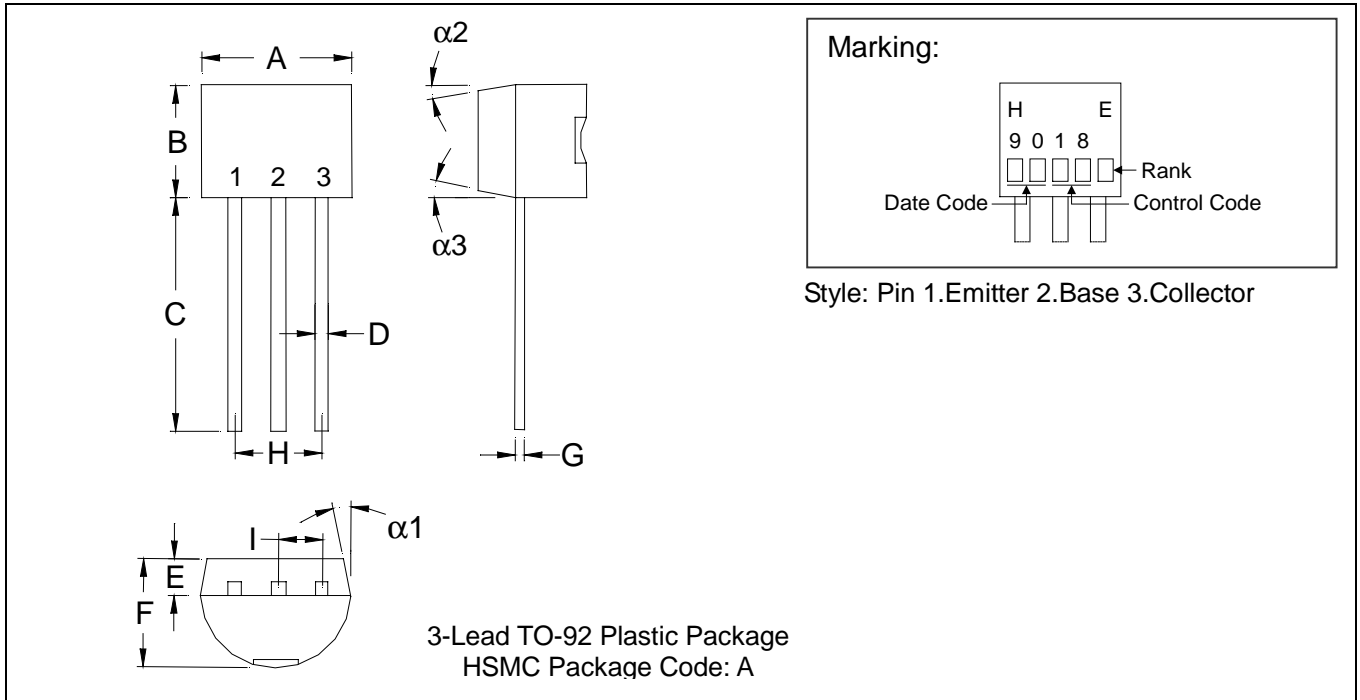


Characteristics Curve





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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