

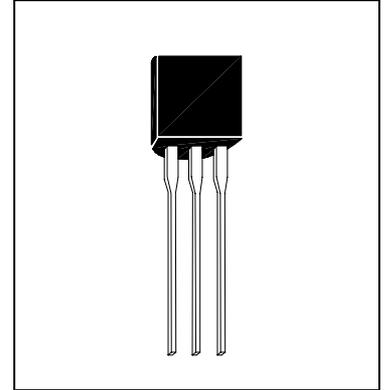


HSC1815

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HSC1815 is designed for use in driver stage of AF amplifier general purpose amplification.



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 400 mW
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage 60 V
VCEO Collector to Emitter Voltage 50 V
VEBO Emitter to Base Voltage 5 V
IC Collector Current 150 mA
IB Base Current 50 mA

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	60	-	-	V	IC=100uA, IE=0
BVCEO	50	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	100	nA	VCB=60V, IE=0
IEBO	-	-	100	nA	VEB=5V, IC=0
*VCE(sat)	-	-	250	mV	IC=100mA, IB=10mA
*VBE(sat)	-	-	1	V	IC=100mA, IB=10mA
*hFE1	120	-	700		VCE=6V, IC=2mA
*hFE2	25	-	-		VCE=6V, IC=150mA
fT	80	-	-	MHz	VCE=10V, IC=1mA, f=100MHz
Cob	-	-	3.5	pF	VCB=10V, f=1MHz, IE=0

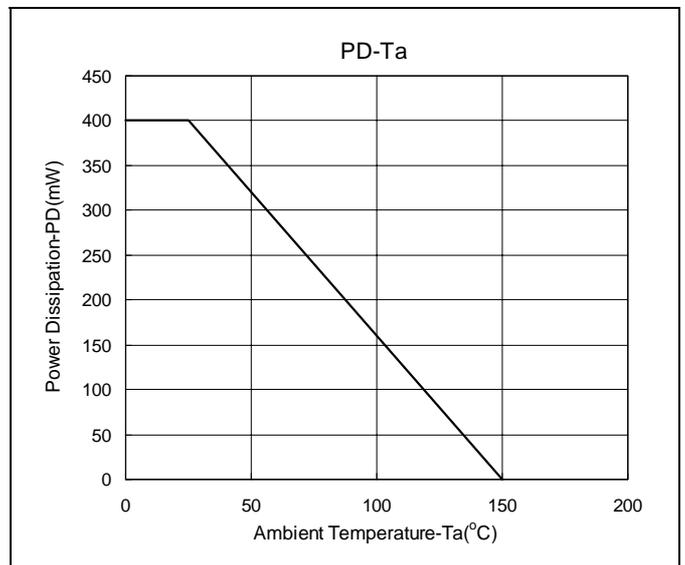
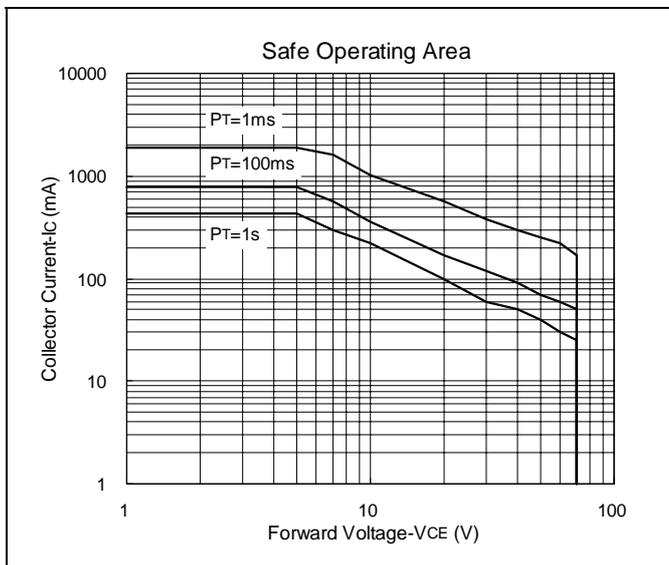
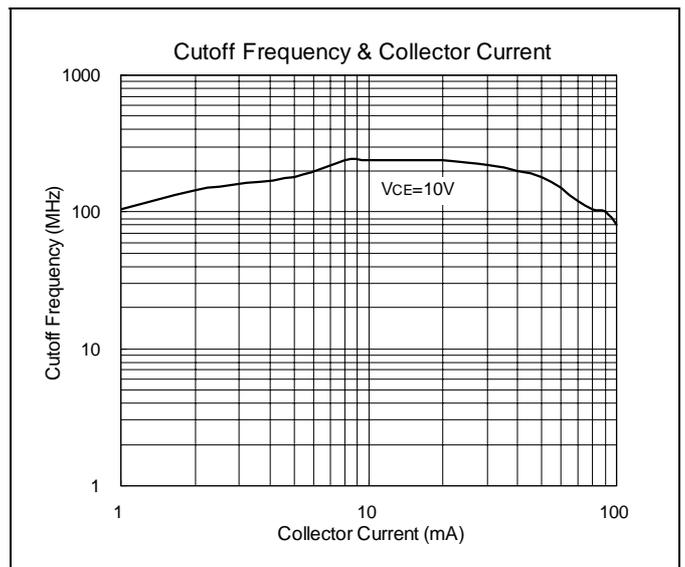
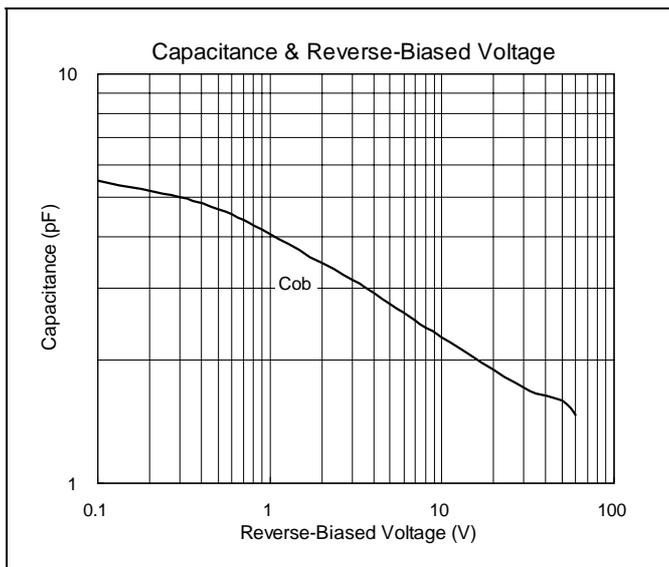
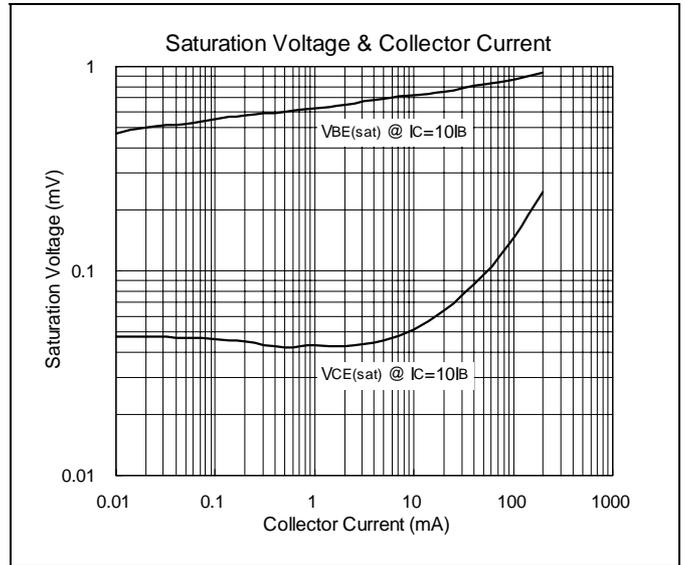
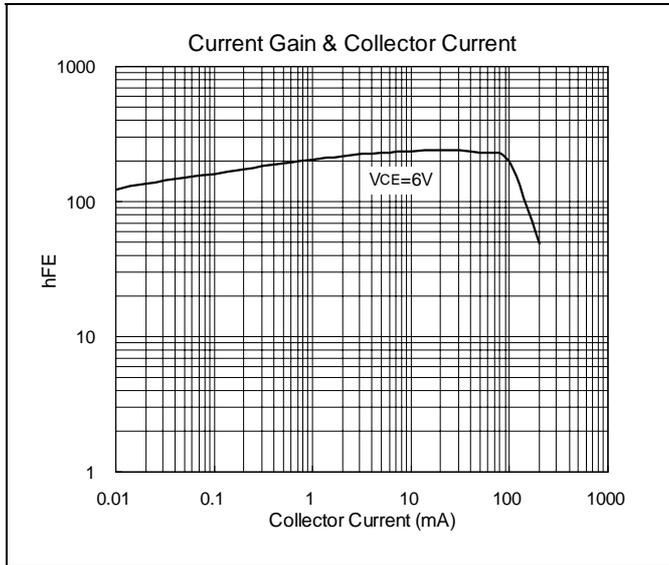
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification of hFE1

Rank	Y	GR	BL
Range	120-240	200-400	350-700

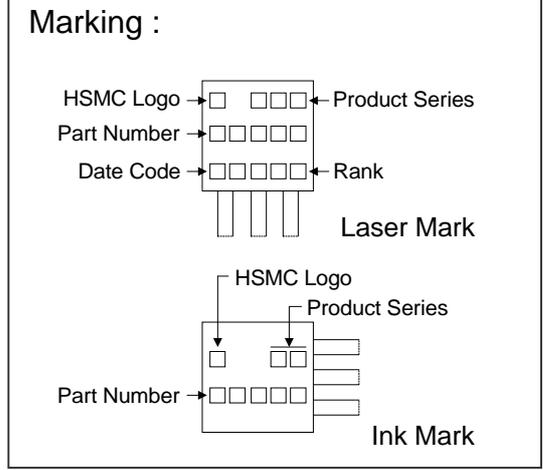
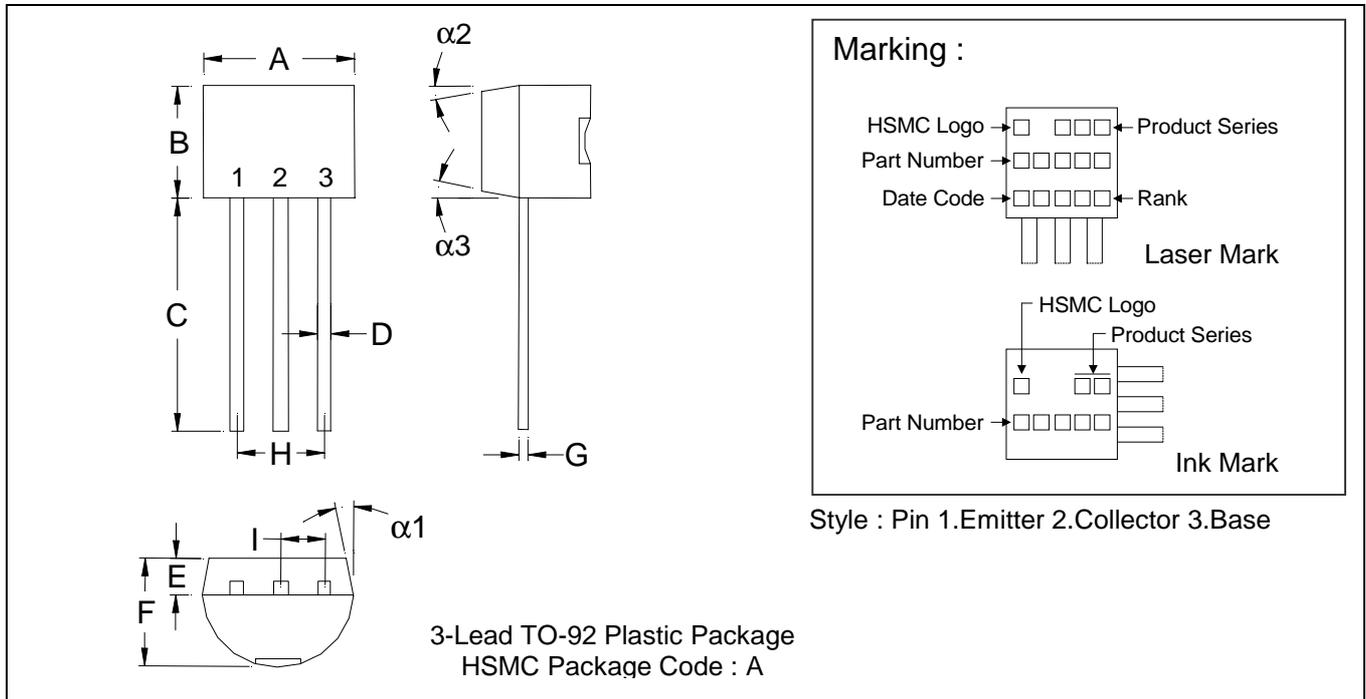


Characteristics Curve





TO-92 Dimension



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

*: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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