

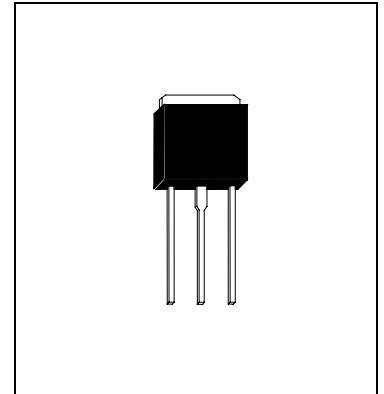


# HI117

PNP EPITAXIAL PLANAR TRANSISTOR

## Description

The HI117 is designed for use in general purpose amplifier and low-speed switching applications.



## Absolute Maximum Ratings (Ta=25°C)

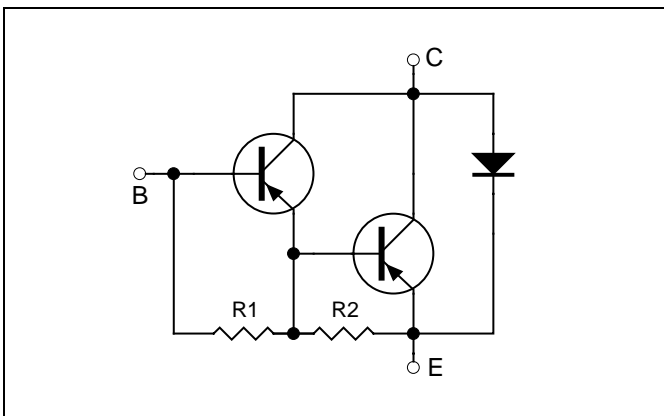
- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  - Total Power Dissipation (Tc=25°C) ..... 25 W
- Maximum Voltages and Currents
  - BVCBO Collector to Base Voltage ..... -100 V
  - BVCEO Collector to Emitter Voltage ..... -100 V
  - BVEBO Emitter to Base Voltage ..... -5 V
  - IC Collector Current (Continue) ..... -4 A
  - IC Collector Current (Peak) ..... -6 A

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-100	-	-	V	IC=-1mA
BVCEO	-100	-	-	V	IC=-30mA
ICBO	-	-	-1	mA	VCB=-100V
ICEO	-	-	-2	mA	VCE=-50V
IEBO	-	-	-2	mA	VEB=-5V
*VCE(sat)	-	-	-2.5	V	IC=-2A, IB=-8mA
*VBE(on)	-	-	-2.8	V	IC=-2A, VCE=-4V
*hFE1	1	-	-	K	IC=-1A, VCE=-4V
*hFE2	500	-	-		IC=-2A, VCE=-4V
Cob	-	-	200	pF	VCB=-10V, f=0.1MHz

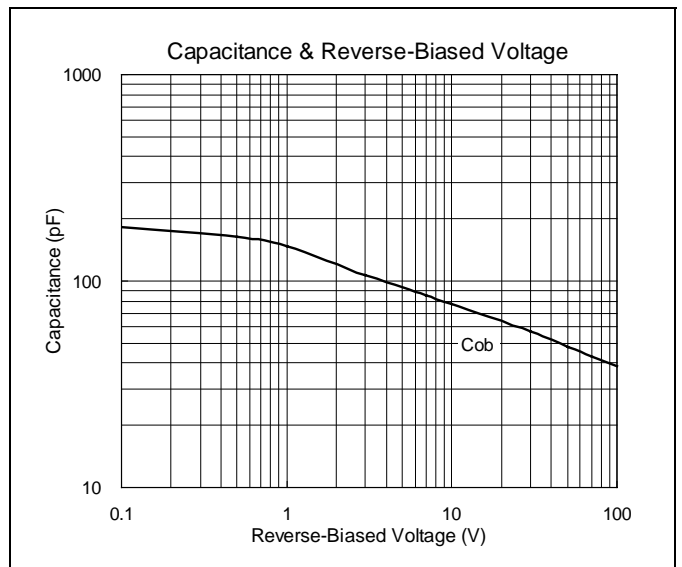
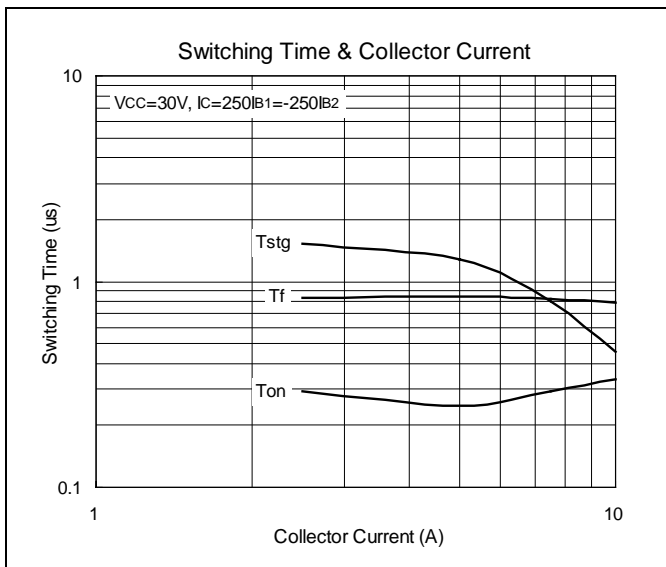
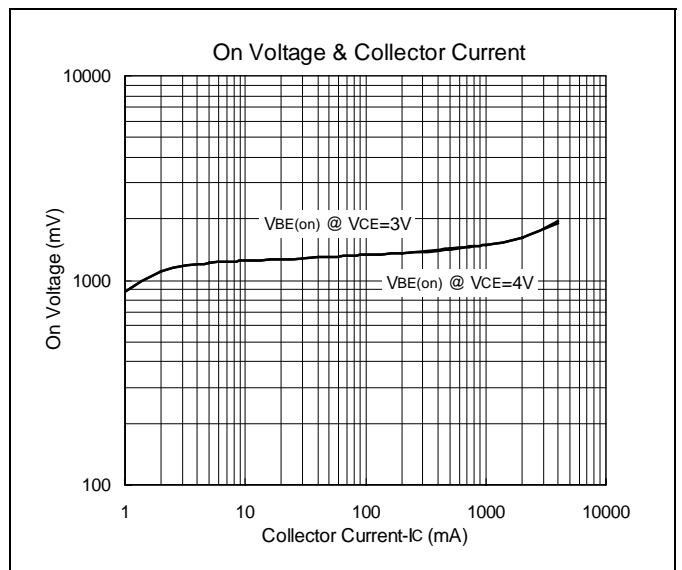
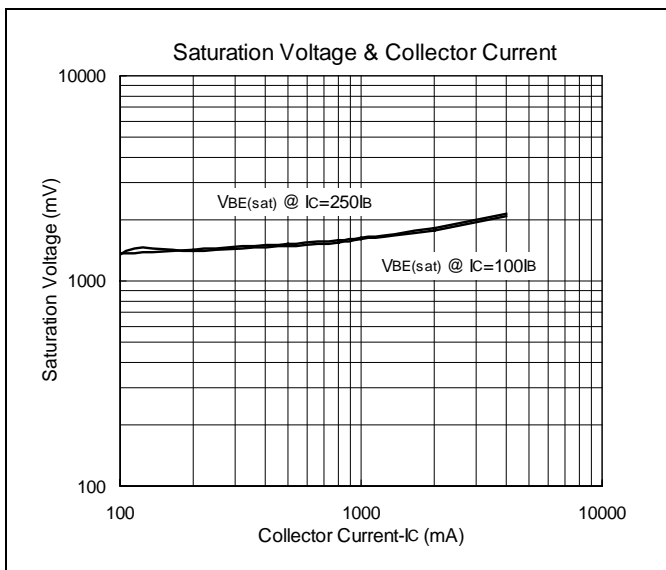
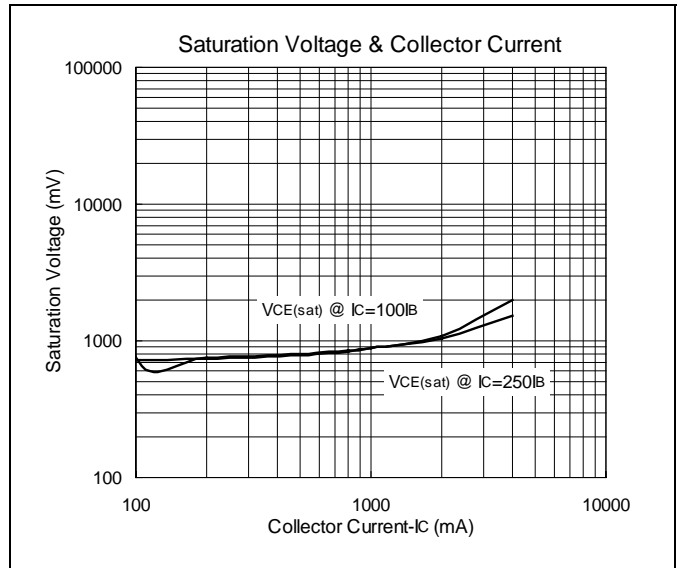
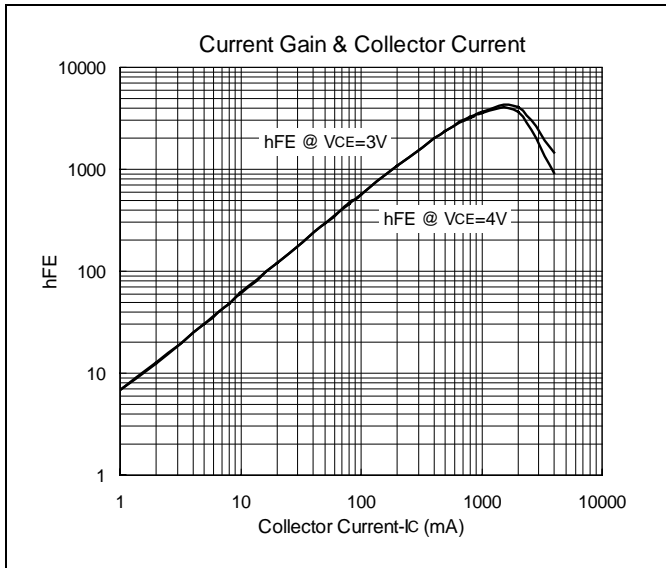
\*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

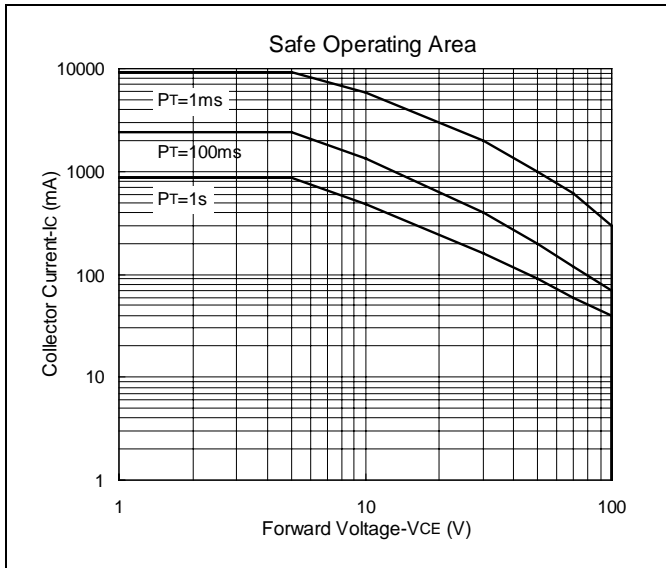
## Darlington Schematic





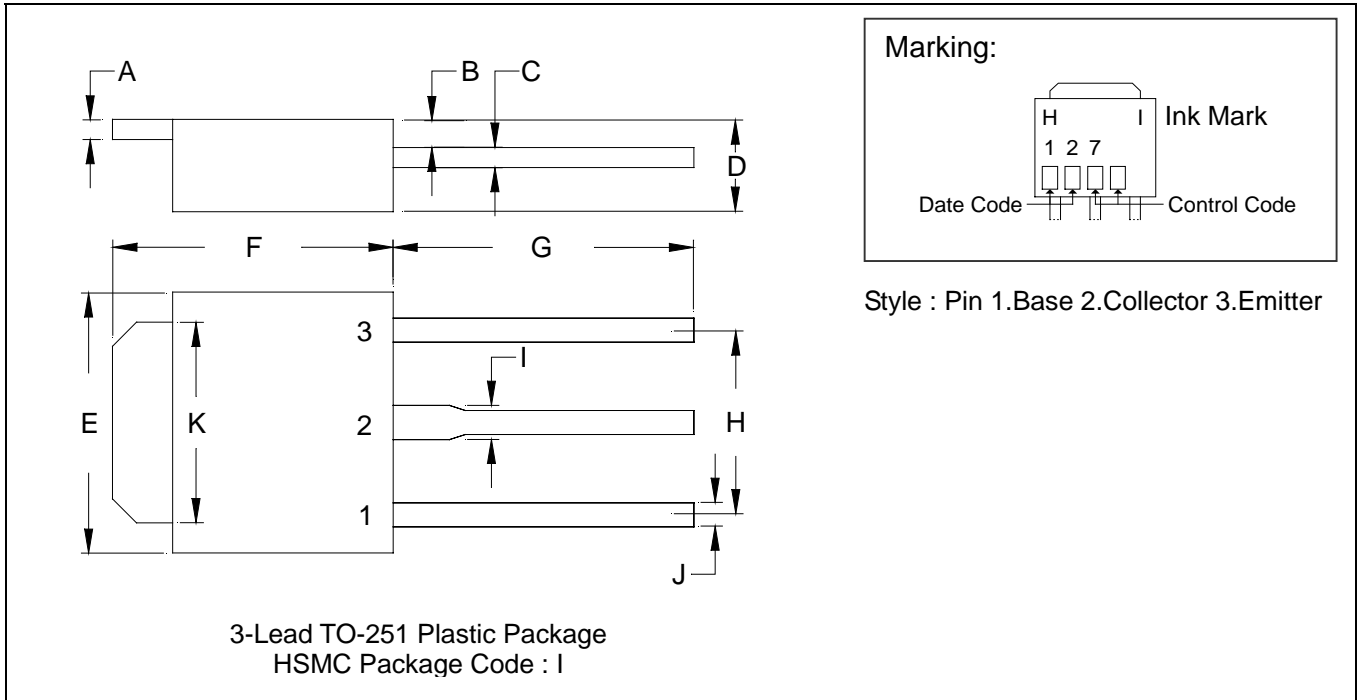
### Characteristics Curve







### TO-251 Dimension



\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0177	0.0217	0.45	0.55	G	0.2559	-	6.50	-
B	0.0354	0.0591	0.90	1.50	H	-	*0.1811	-	*4.60
C	0.0177	0.0236	0.45	0.60	I	-	0.0354	-	0.90
D	0.0866	0.0945	2.20	2.40	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2677	0.2835	6.80	7.20					

- Notes :**
- 1.Dimension and tolerance based on our Spec. dated May. 24,1995.
  - 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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