

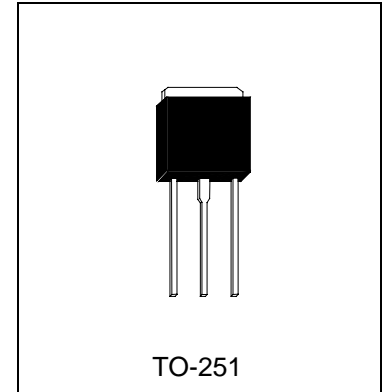


HI112

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HI112 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 (Ta=25°C) 25 W
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage 100 V
VCEO Collector to Emitter Voltage 100 V
VEBO Emitter to Base Voltage 5 V
IC Collector Current 4 A

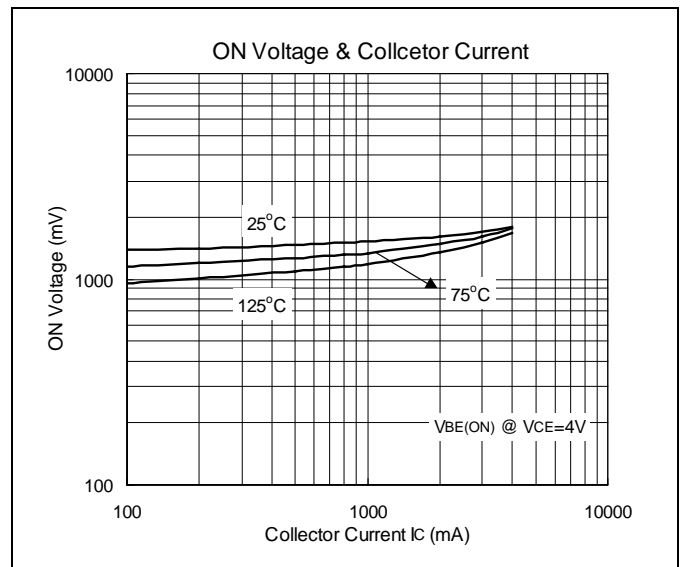
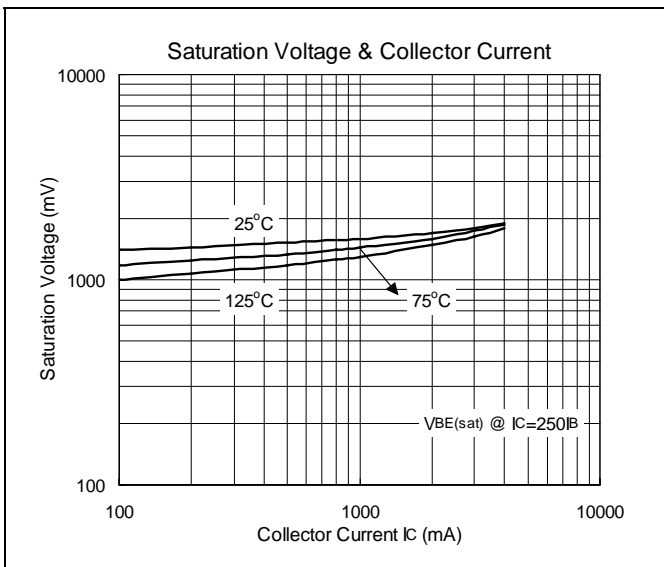
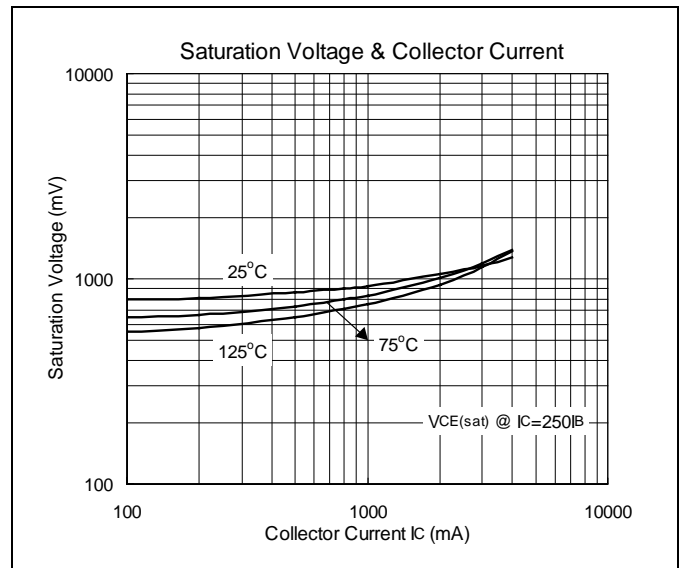
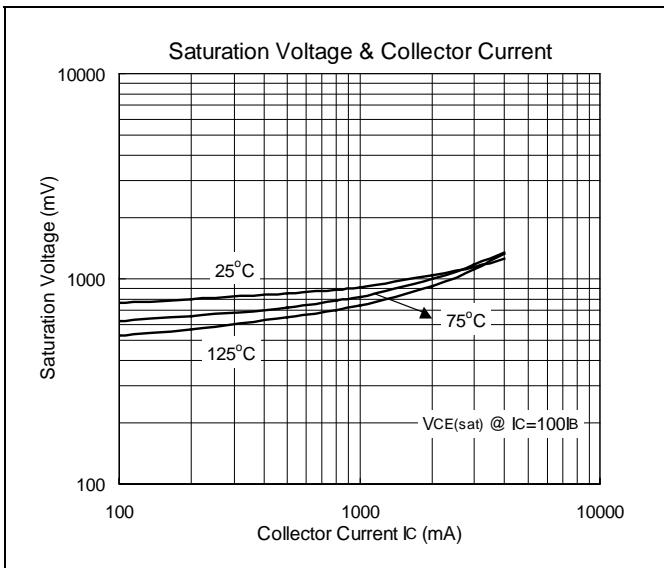
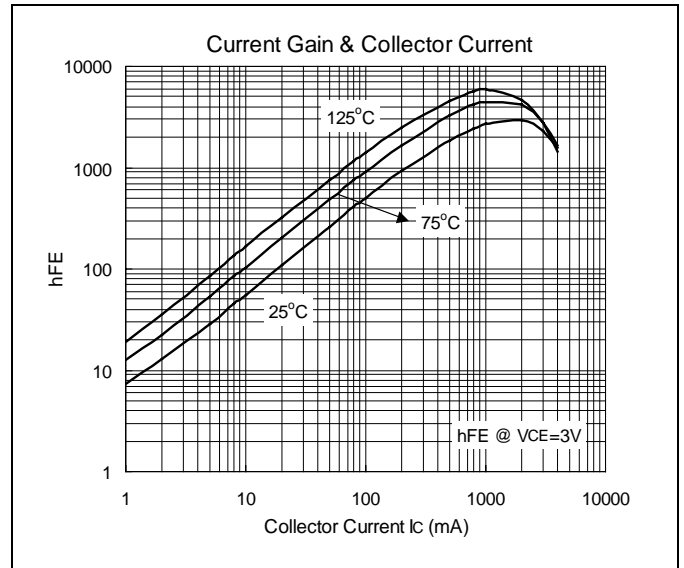
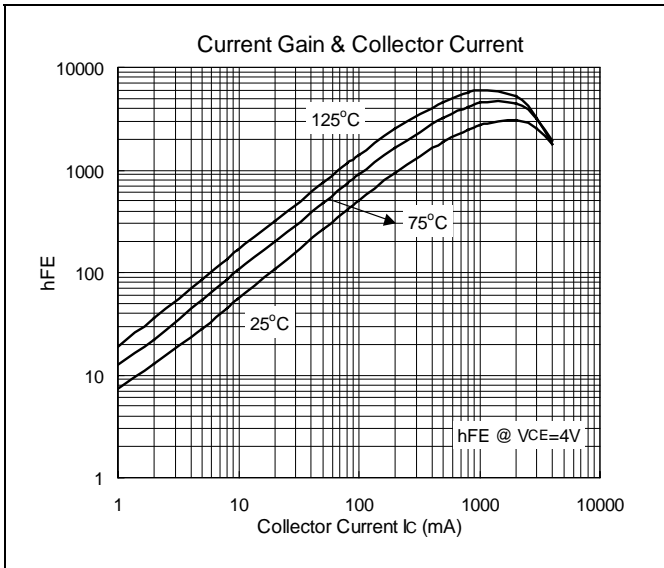
Characteristics (Ta=25°C)

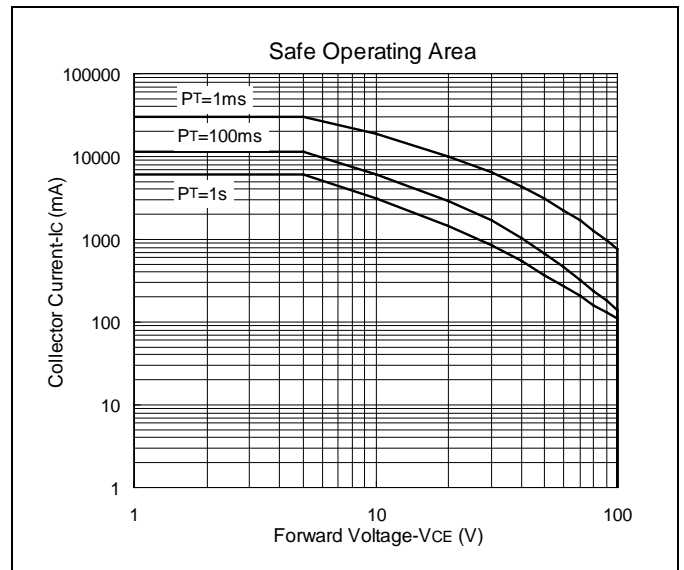
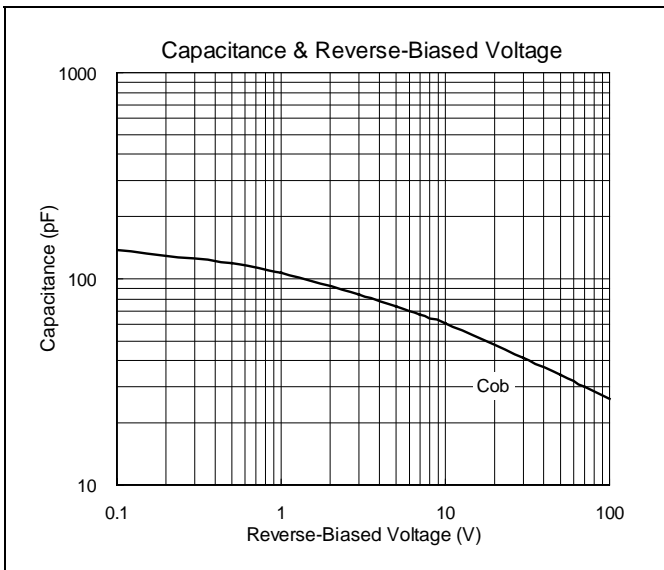
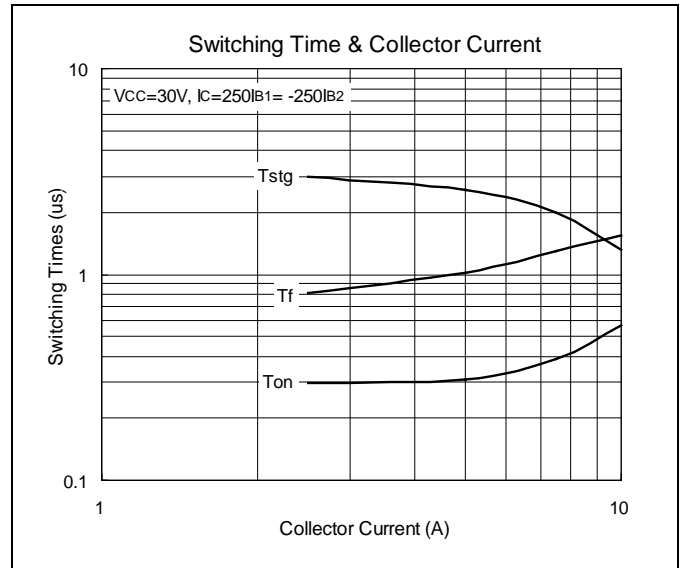
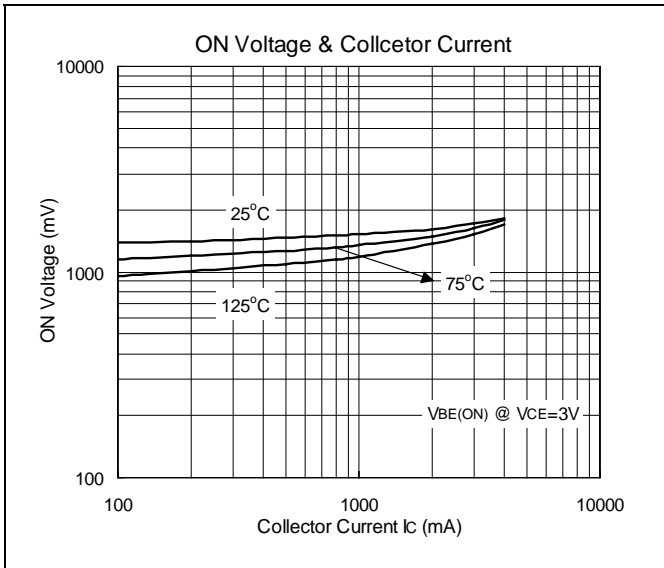
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	IC=1mA
BVCEO	100	-	-	V	IC=30mA
ICBO	-	-	10	uA	VCB=80V
ICEO	-	-	20	uA	VCE=50V
IEBO	-	-	2	mA	VEB=5V
*VCE(sat)1	-	-	2	V	IC=2A, IB=8mA
*VCE(sat)2	-	-	3	V	IC=4A, IB=40mA
*VBE(on)	-	-	2.8	V	IC=2A, VCE=4V
*VBE(sat)	-	-	4	V	IC=4A, IB=80mA
*hFE1	500	-	-		IC=0.5A, VCE=3V
*hFE2	1	-	12	K	IC=2A, VCE=3V
*hFE3	200	-	-		IC=4A, VCE=3V
Cob	-	-	100	pF	VCB=10V

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



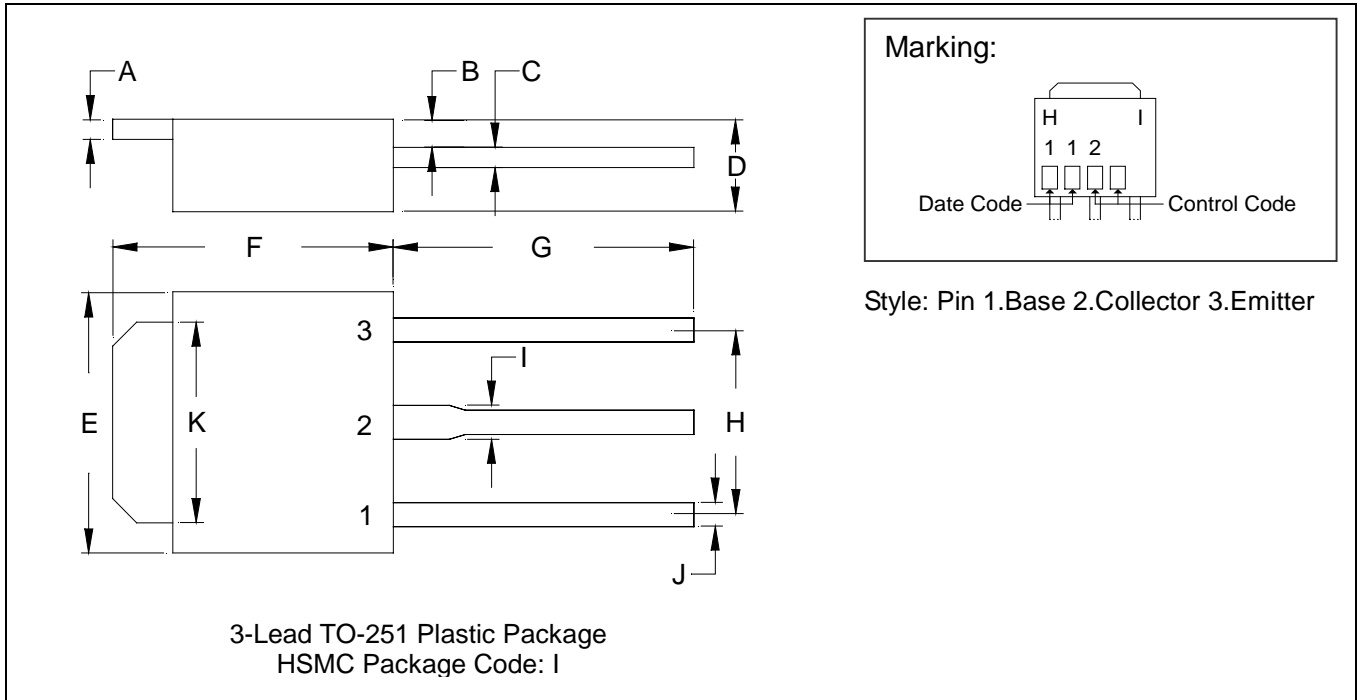
Characteristics Curve







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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