



# HI41C

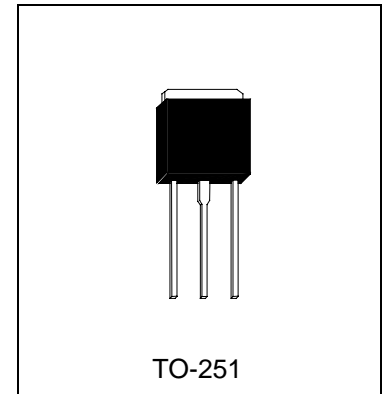
NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HI41C is designed for use in general purpose amplifier and switching applications.

## Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... +150 °C
- Maximum Power Dissipation
  - Total Power Dissipation (Tc=25°C) ..... 20 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 ..... 6 A



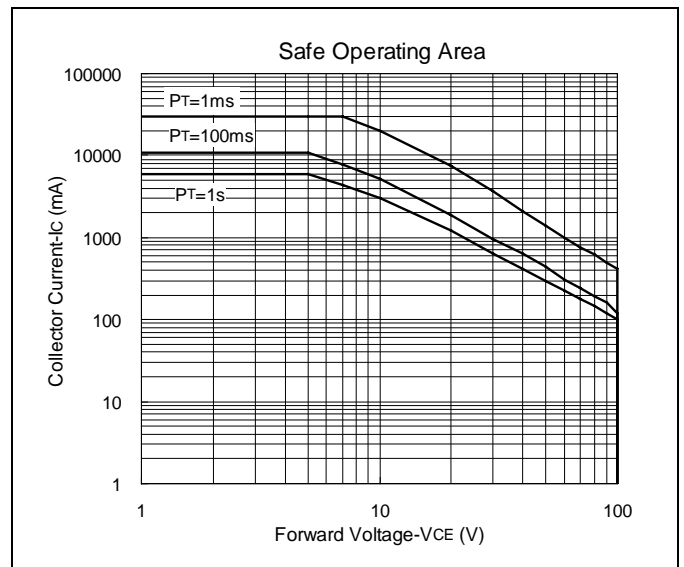
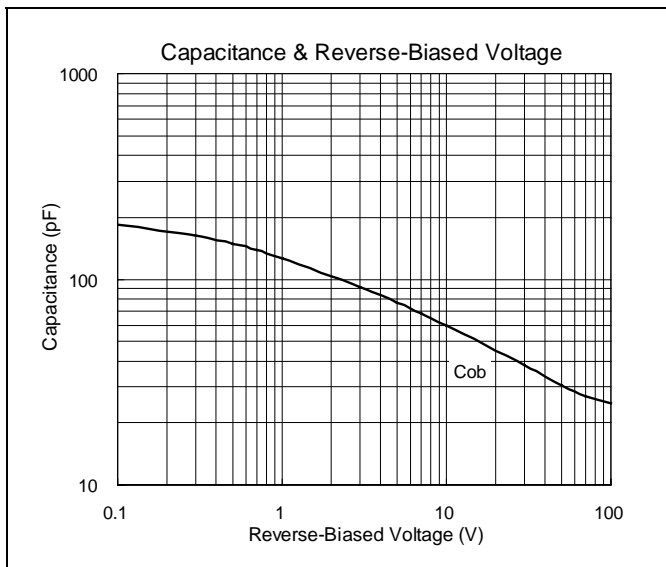
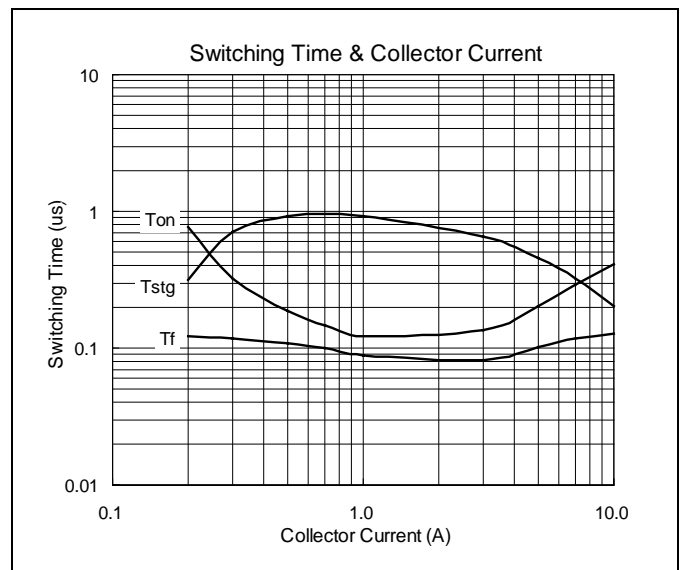
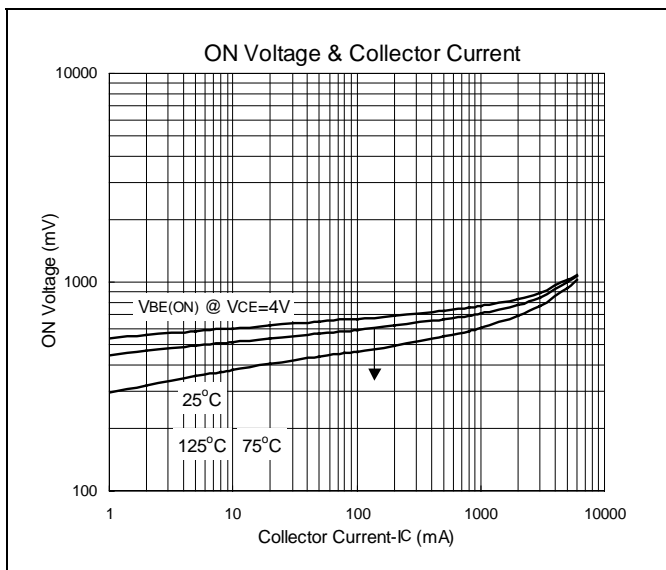
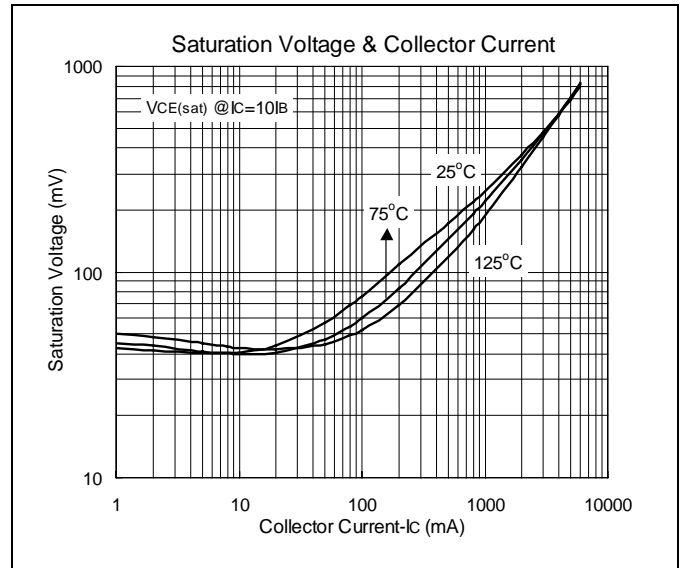
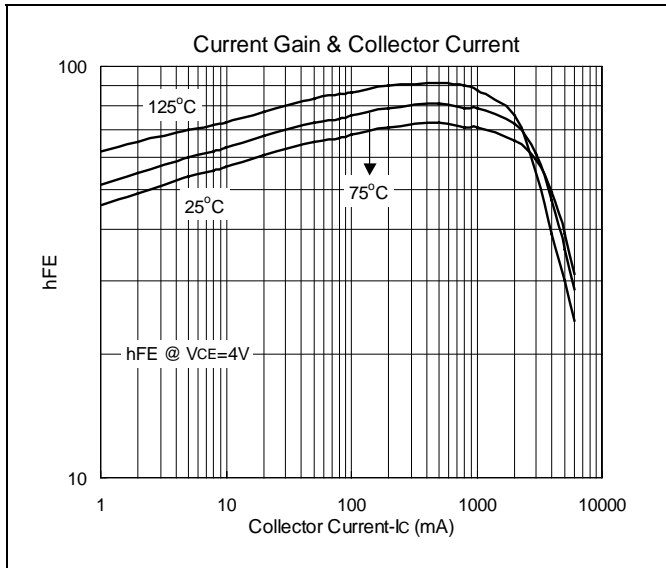
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	IC=1mA, IE=0
BVCEO	100	-	-	V	IC=30mA, IB=0
BVEBO	5	-	-	V	IC=1mA, IC=0
ICES	-	-	10	uA	VCE=100V, VEB=0
ICEO	-	-	50	uA	VCE=60V, IB=0
IEBO	-	-	500	uA	VEB=5V, IC=0
*VCE(sat)	-	-	1.5	V	IC=6A, IB=600mA
*VBE(on)	-	-	2	V	VCE=4V, IC=6A
*hFE1	30	-	-	-	VCE=4V, IC=300mA
*hFE2	15	-	75	-	VCE=4V, IC=3A
fT	3	-	-	MHz	VCE=10V, IC=500mA, f=1MHz

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

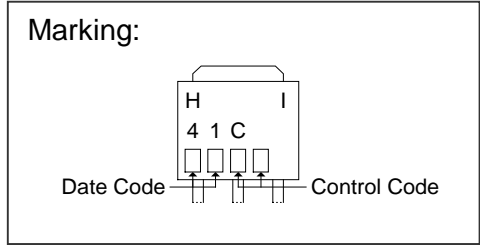
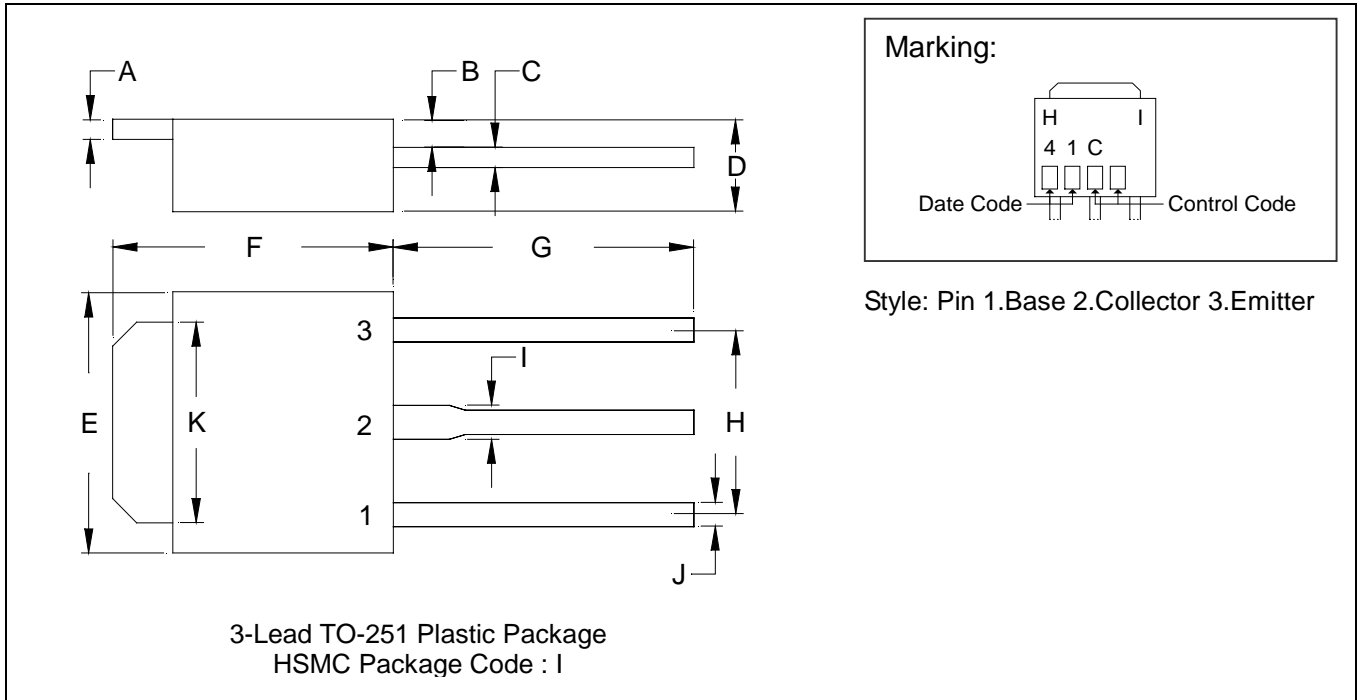


### Characteristics Curve





### TO-251 Dimension



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

\*: 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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**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



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