

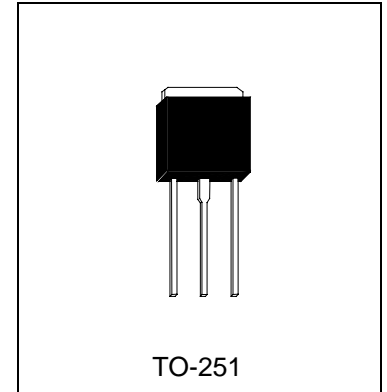


HI50

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HI50 is designed for line operated audio output amplifier switch mode power supply drivers and other 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 500 V
 BVCEO Collector to Emitter Voltage 400 V
 BVEBO Emitter to Base Voltage 5 V
 IC Collector Current 1 A

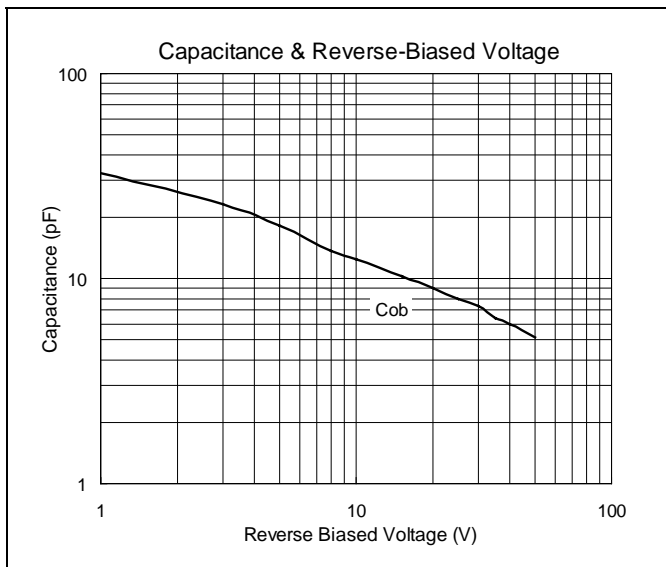
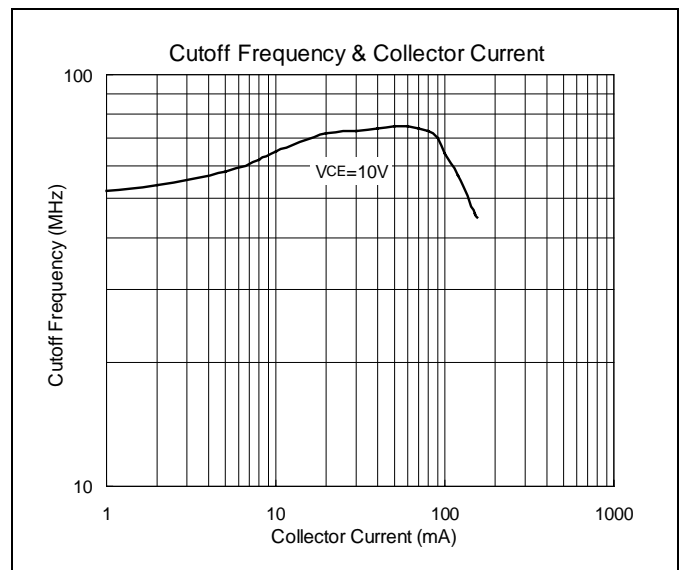
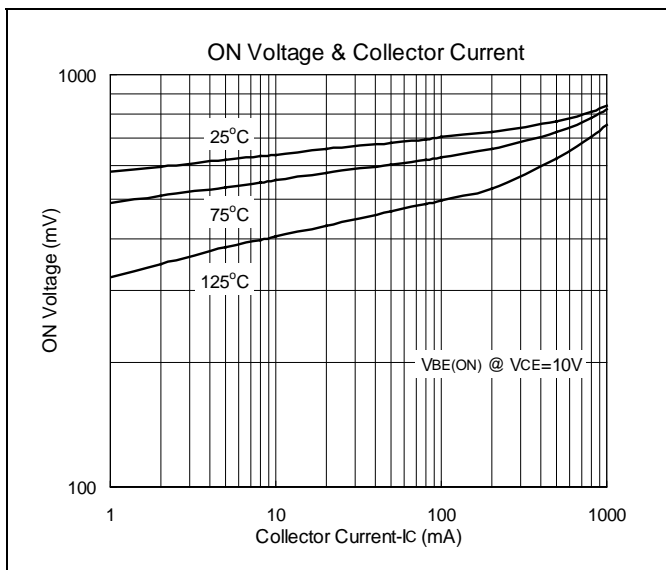
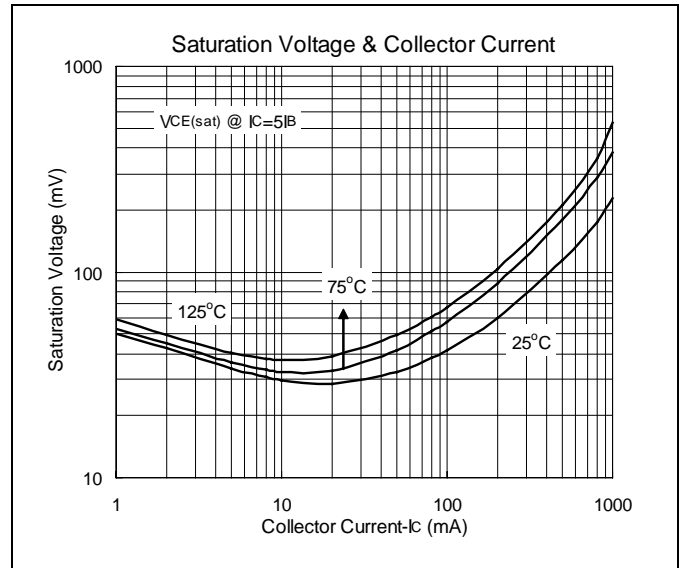
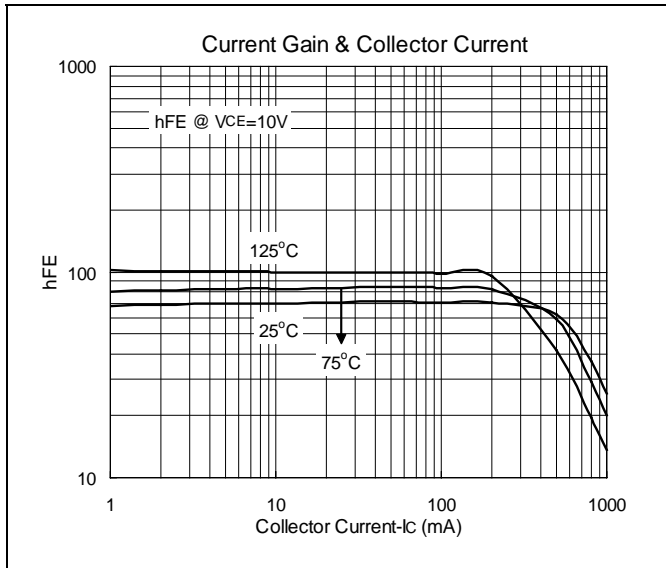
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	500	-	-	V	IC=1mA
BVCEO	400	-	-	V	IC=30mA
BVEBO	5	-	-	V	IC=100uA
ICES	-	-	100	uA	VCE=500V
ICEO	-	-	200	uA	VCE=300V
IEBO	-	-	1	mA	VEB=5V
*VCE(sat)	-	-	1	V	IC=1A, IB=0.2A
*VBE(on)	-	-	1.5	V	VCE=10V, IC=1A
*hFE1	30	-	150		VCE=10V, IC=0.3A
*hFE2	10	-	-		VCE=10V, IC=1A
fT	10	-	-	MHz	VCE=10V, IC=200mA, f=2MHz

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

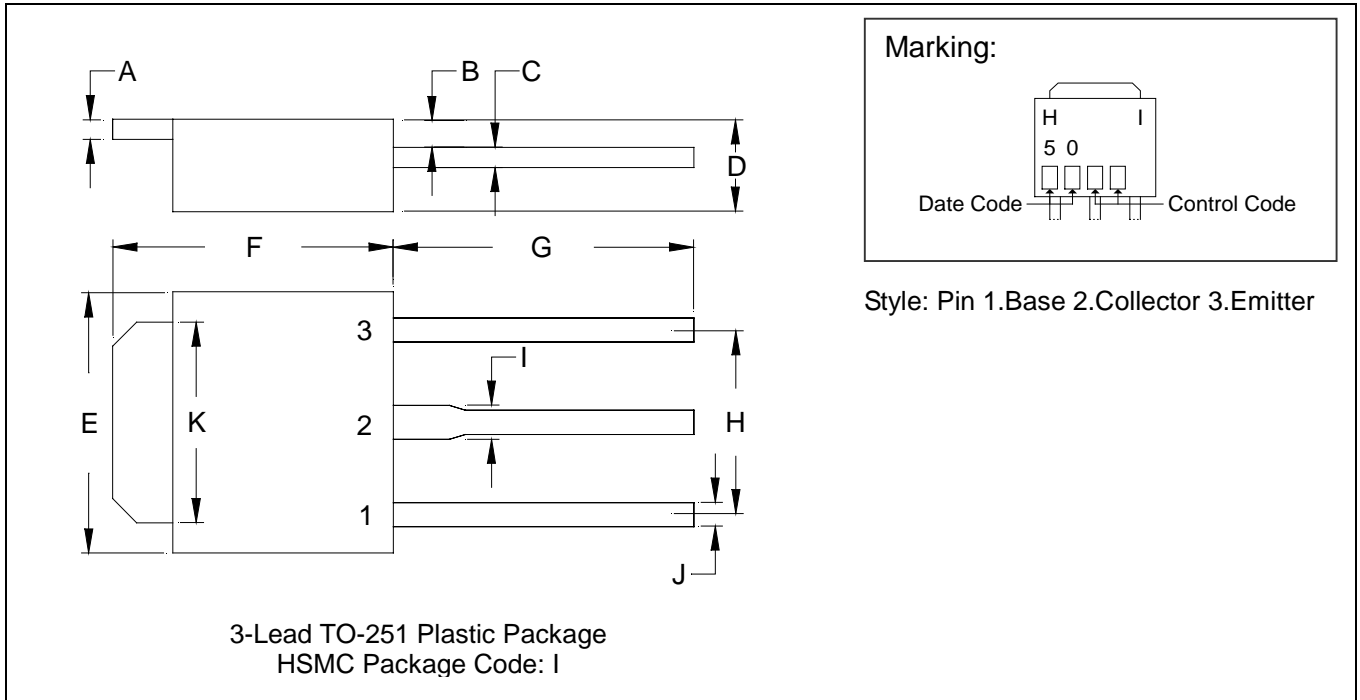


Characteristics Curve





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

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- **HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

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