



HI1609

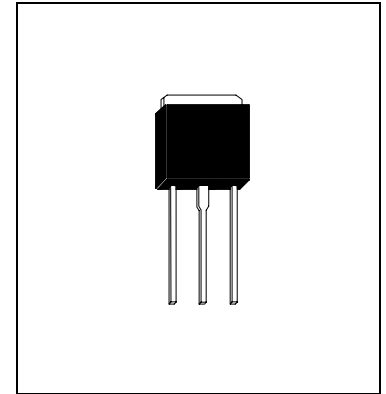
NPN EPITAXIAL PLANAR TRANSISTOR

Description

- Low frequency high voltage amplifier
- Complementary pair with HI1109

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 160 V
BVCEO Collector to Emitter Voltage 160 V
BVEBO Emitter to Base Voltage 5 V
IC Collector Current (DC) 100 mA



Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	160	-	-	V	IC=10uA, IE=0
BVCEO	160	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	10	uA	VCB=140V, IE=0
*VCE(sat)	-	-	2	V	IC=30mA, IB=3mA
VBE(on)	-	-	1.5	V	IC=10mA, VCE=5V
*hFE1	60	-	320		VCE=5V, IC=10mA
*hFE2	30	-	-		VCE=5V, IC=1mA
fT	-	140	-	MHz	VCE=5V, IC=10mA
Cob	-	3.8	-	pF	VCB=10V, f=1MHz

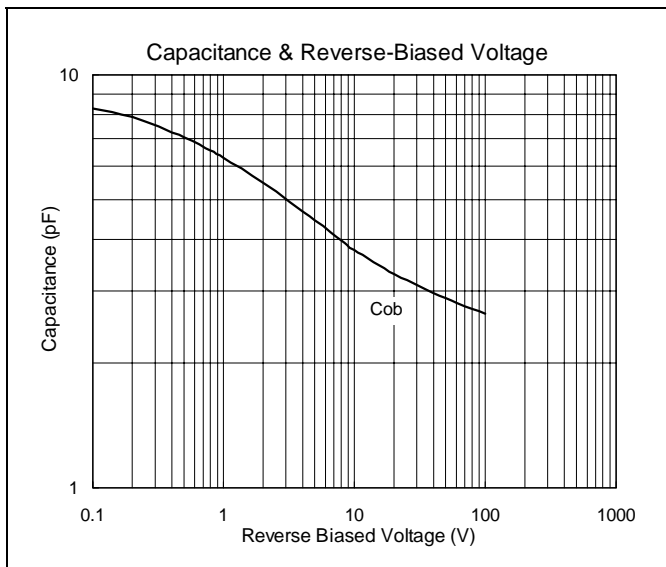
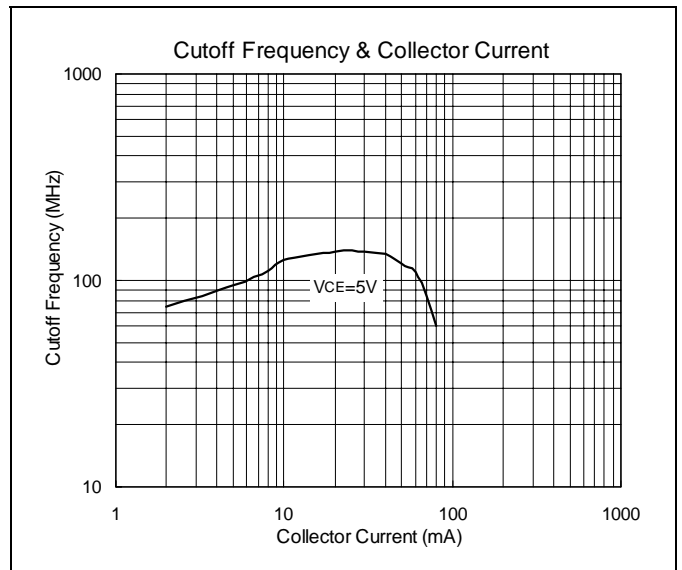
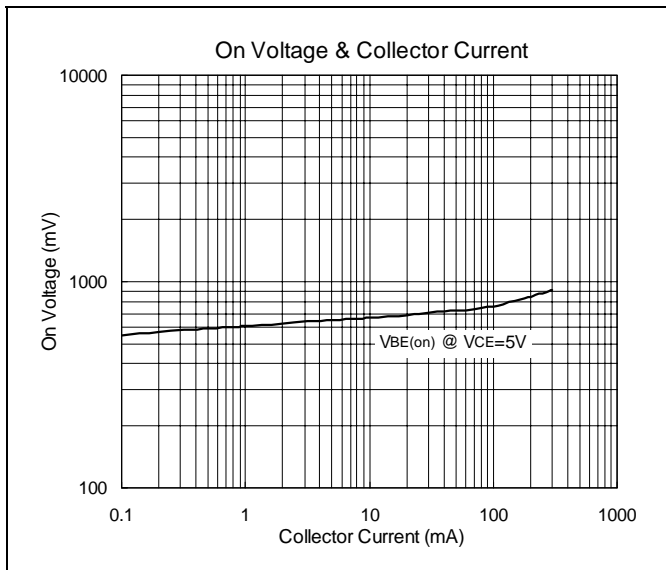
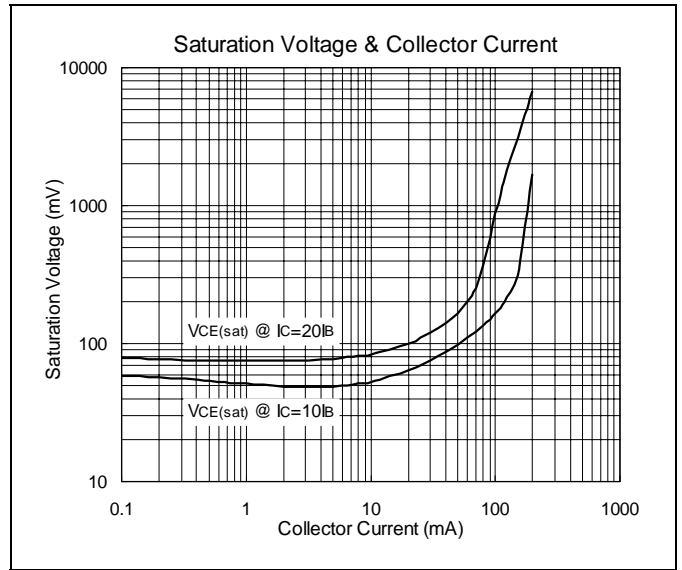
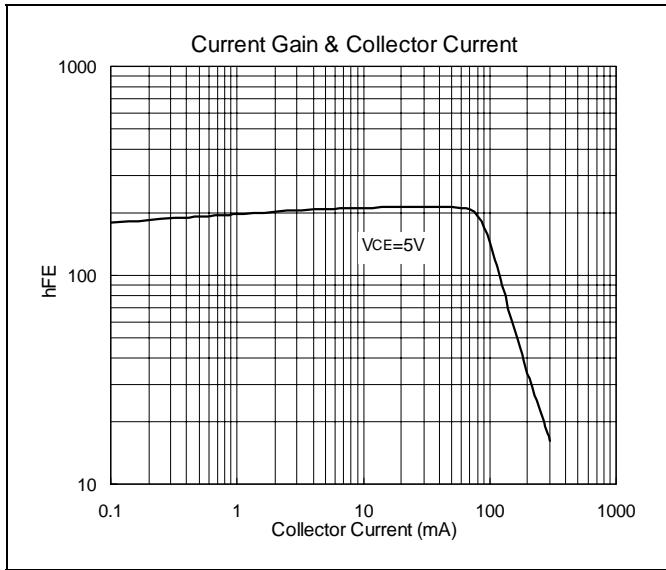
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE1

Rank	B	C	D
Range	60-120	120-200	160-320

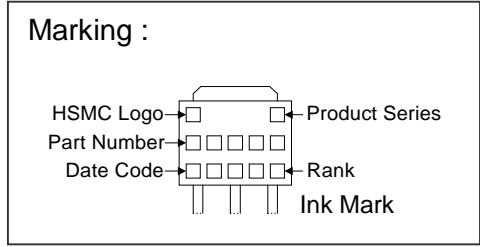
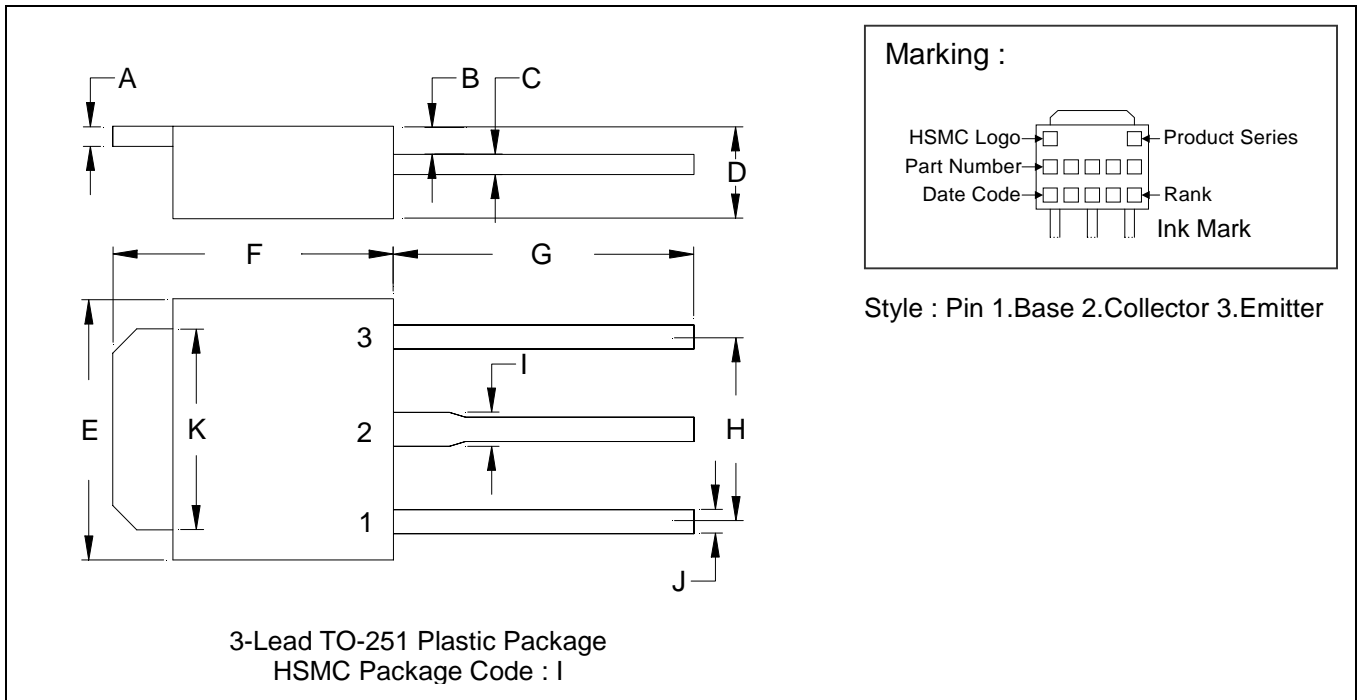


Characteristics Curve





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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