



# HI122

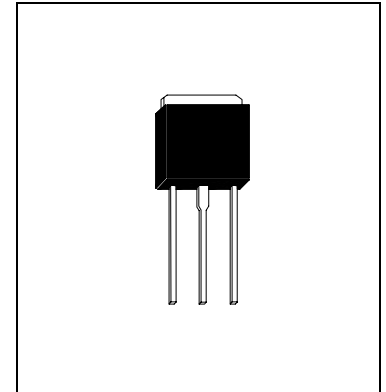
NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HI122 is designed of general purpose and low speed switching applications.

## Features

- High DC current gain
- Built-in a damper diode at E-C



## 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) ..... 20W
- 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 ..... 8 A

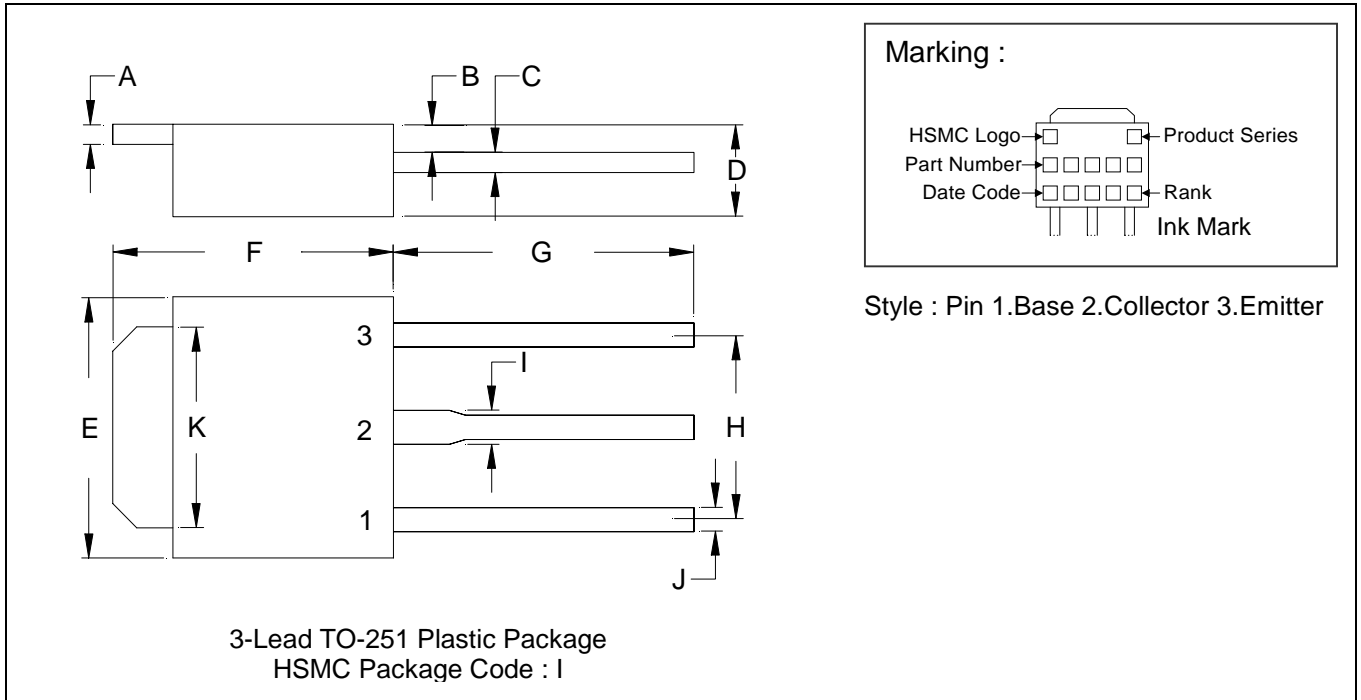
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	IC=1mA
BVCEO	100	-	-	V	IC=30mA
BVEBO	5	-	-	V	IE=1mA
ICBO	-	-	10	uA	VCB=100V
ICEO	-	-	10	uA	VCE=50V
IEBO	-	-	2	mA	VEB=5V
*VCE(sat)1	-	-	2	V	IC=4A, IB=16mA
*VCE(sat)2	-	-	4	V	IC=8A, IB=80mA
*VBE(sat)	-	-	4.5	V	IC=8A, IB=80mA
*VBE(on)	-	-	2.8	V	VCE=4V, IC=4A
*hFE1	1K	-	12K		VCE=4V, IC=4A
*hFE2	100	-	-		VCE=4V, IC=8A
Cob	-	130	-	pF	VCB=10V, f=1MHz

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



## 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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