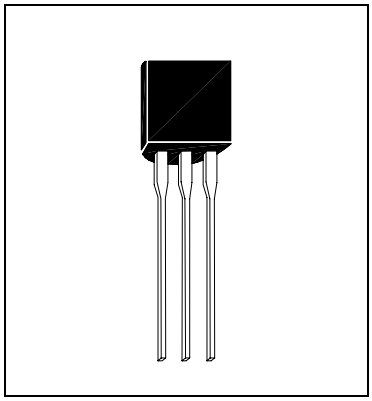
HMPS651

NPN SILICON TRANSISTOR



Description

Amplifier transistor

Absolute Maximum Ratings

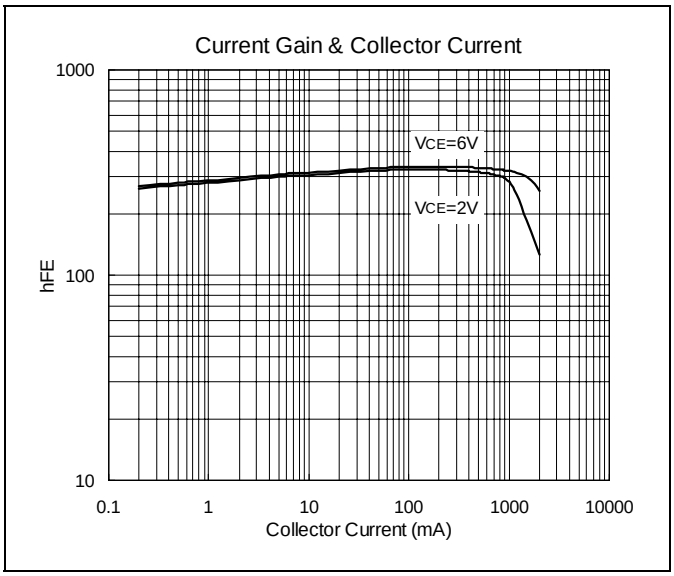
- Maximum Temperatures
  Storage Temperature ..... -55 ~ +150 °C
  Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) ..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)
  VCBO Collector to Base Voltage ..... 80 V
  VCEO Collector to Emitter Voltage ..... 60 V
  VEBO Emitter to Base Voltage ..... 5 V
  IC Collector Current ..... 2 A

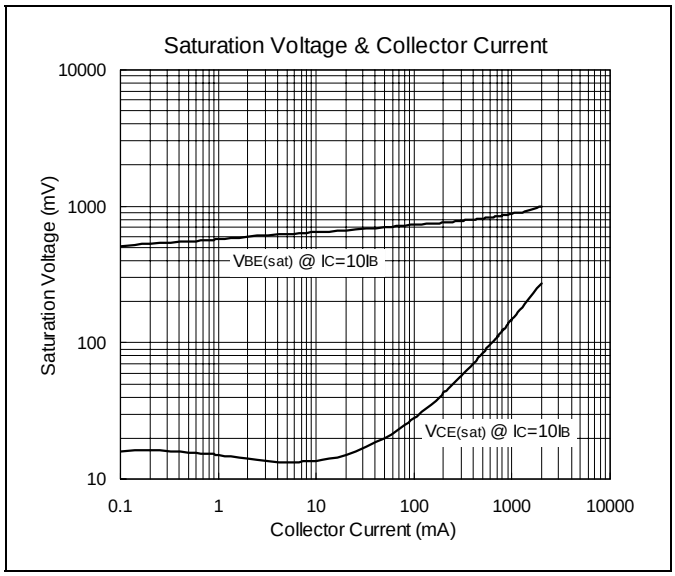
Characteristics (Ta=25°C)

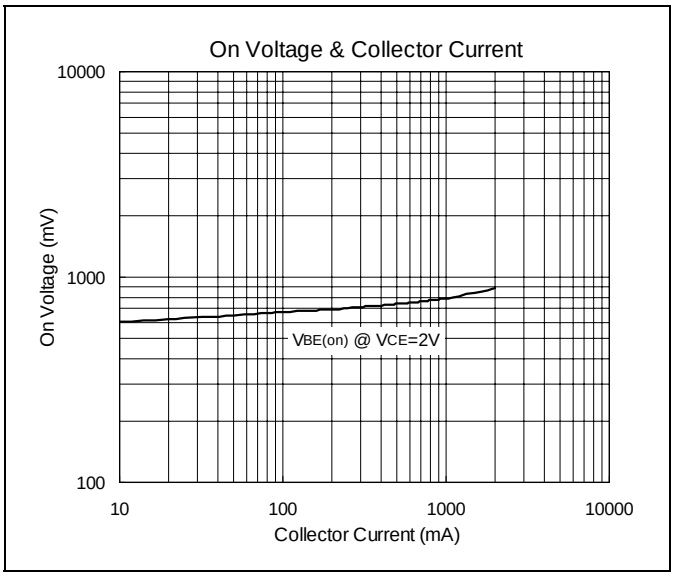
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	80	-	-	V	IC=10mA, IB=0
BVCEO	60	-	-	V	IC=100uA, IE=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	0.1	uA	VCB=80V, IE=0
IEBO	-	-	0.1	uA	VEB=4V, IC=0
*VCE(sat)1	-	-	0.5	V	IC=2A, IB=200mA
*VCE(sat)2	-	-	0.3	V	IC=1A, IB=100mA
*VBE(sat)	-	-	1.2	V	IC=1A, IB=100mA
VBE(on)	-	-	1	V	IC=1A, VCE=2V
*hFE1	75	-	-		IC=50mA, VCE=2V
*hFE2	75	-	-		IC=500mA, VCE=2V
*hFE3	75	-	-		IC=1A, VCE=2V
*hFE4	40	-	-		IC=2A, VCE=2V
fT	75	-	-	MHz	IC=50mA, VCE=5V, f=100MHz

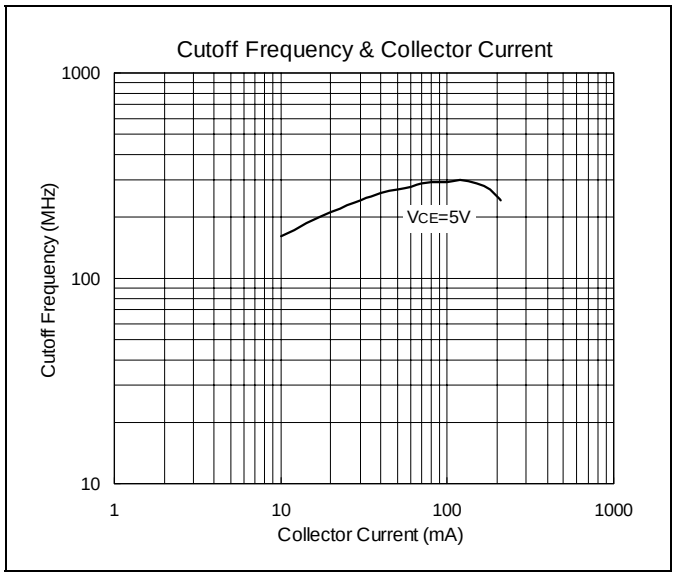
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

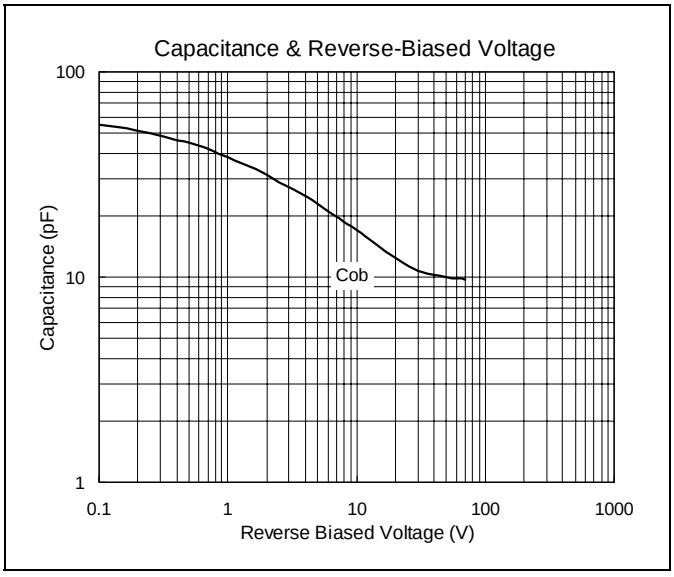
Characteristics Curve

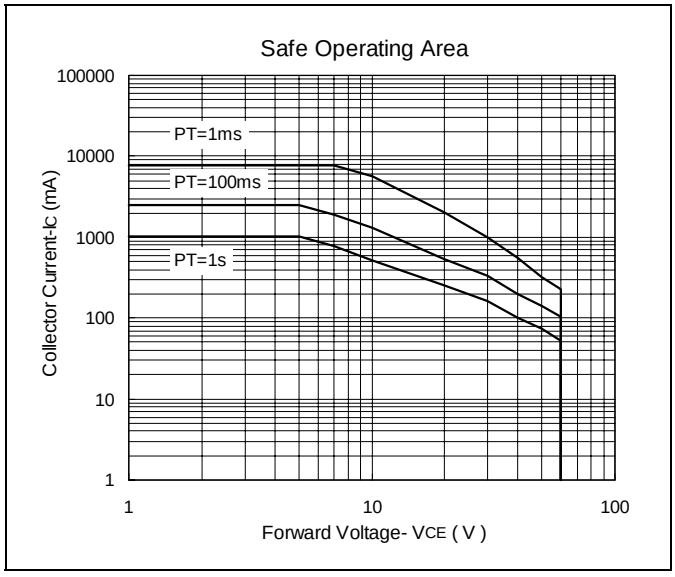


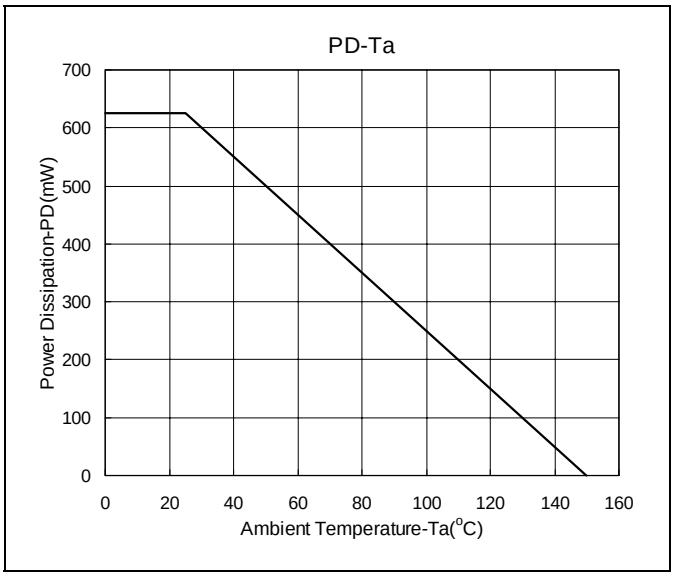




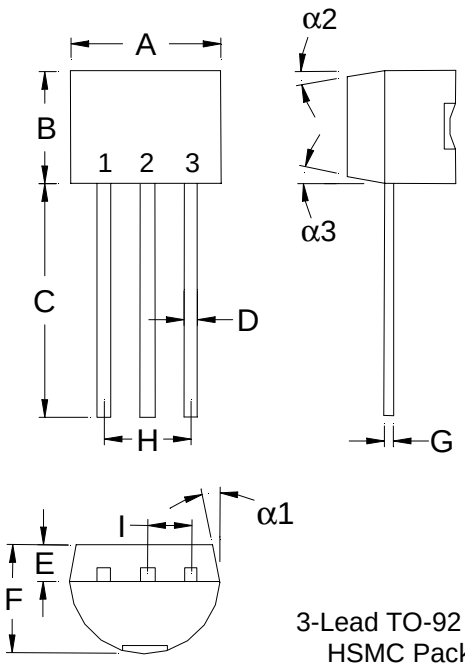






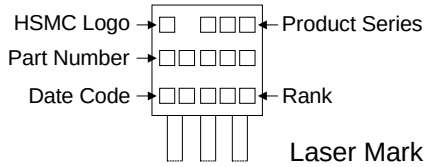

PD-Ta
Power Dissipation-PD(mW)
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
Ambient Temperature-Ta(°C)

TO-92 Dimension

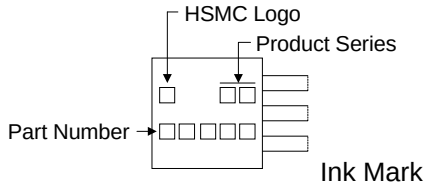


3-Lead TO-92 Plastic Package
HSMC Package Code : A

Marking :



Laser Mark



Ink Mark

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

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*2°	-	*2°

Notes : 1.Dimension and tolerance based on our Spec. dated Apr. 25,1996.
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

Head Office And Factory :

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  Tel : 886-3-5983621~5 Fax : 886-3-5982931
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