

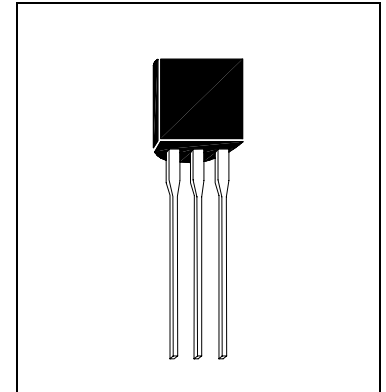


# H2N6427

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

Darlington 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 ..... 40 V
  - VCES Collector to Emitter Voltage..... 40 V
  - VEBO Emitter to Base Voltage ..... 12 V
  - IC Collector Current ..... 500 mA

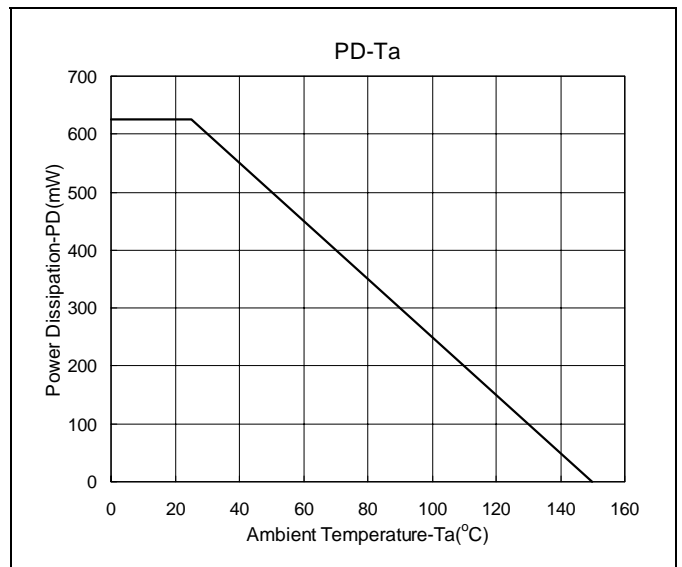
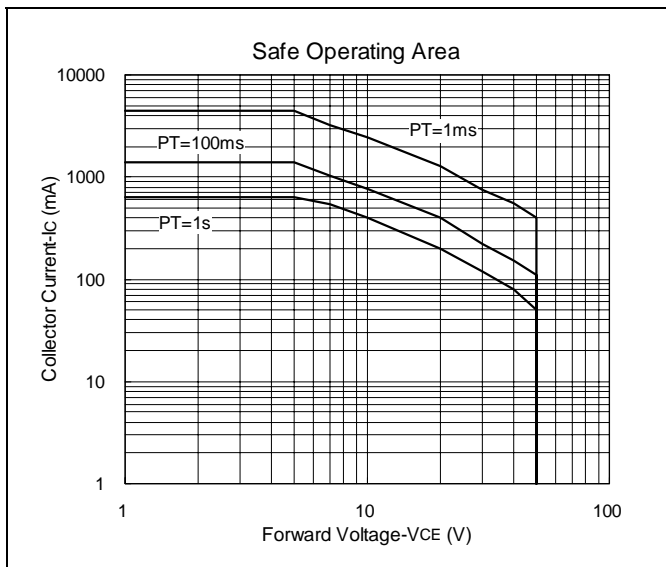
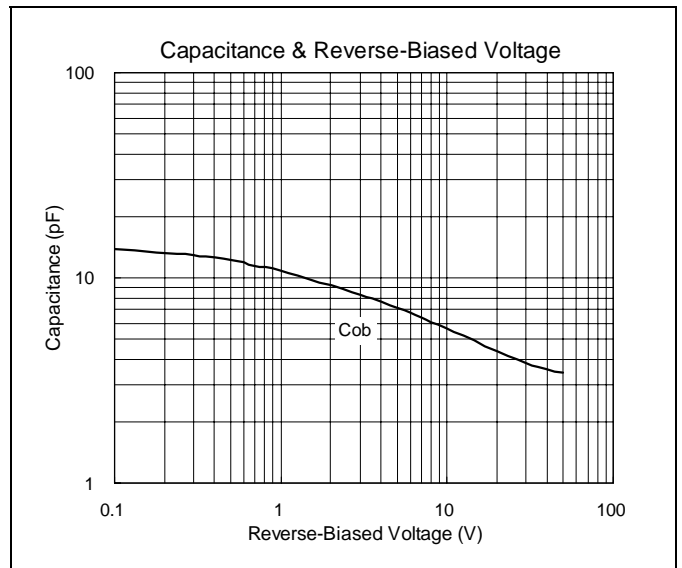
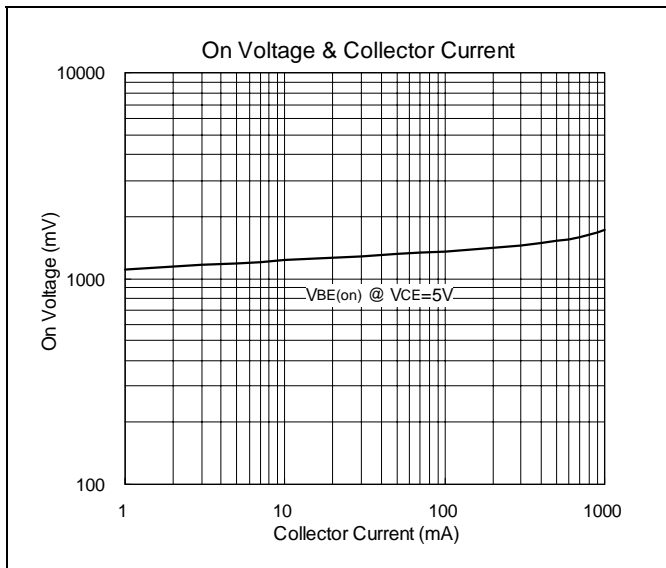
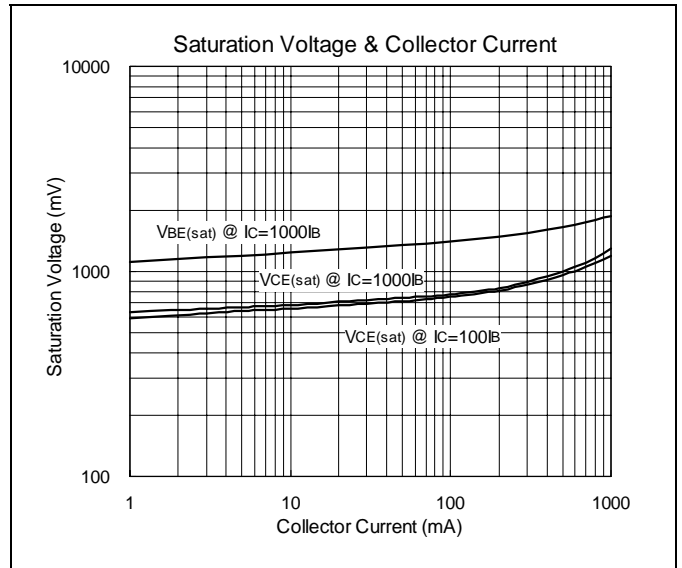
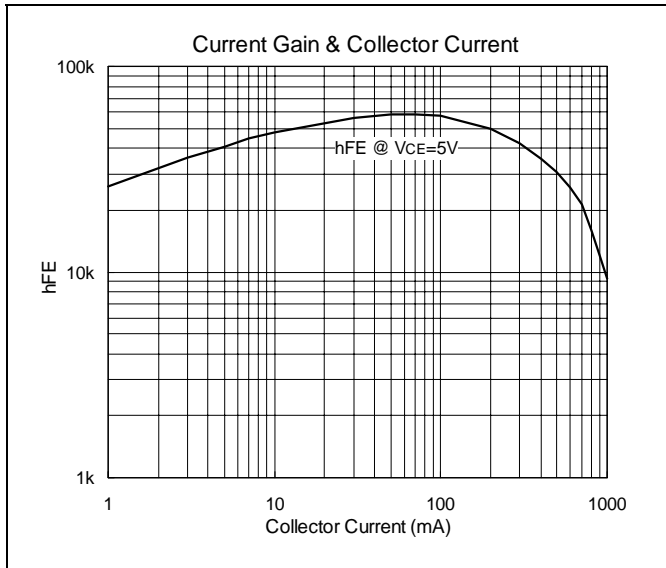
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA, IE=0
BVCES	40	-	-	V	IC=10uA, IB=0
BVEBO	12	-	-	V	IE=10uA, IC=0
ICBO	-	-	50	nA	VCB=30V, IE=0
IEBO	-	-	50	nA	VEB=10V, IC=0
ICES	-	-	1	uA	VCE=25V, VBE=0
*VCE(sat)1	-	0.71	1.2	V	IC=50mA, IB=0.5mA
*VCE(sat)2	-	0.9	1.5	V	IC=500mA, IB=0.5mA
*VBE(sat)	-	1.52	2.0	V	IC=500mA, IB=0.5mA,
VBE(on)	-	1.24	1.75	V	VCE=5V, IC=50mA
*hFE1	10	-	100	K	VCE=5V, IC=10mA
*hFE2	20	-	200	K	VCE=5V, IC=100mA
*hFE3	14	-	140	K	VCE=5V, IC=500mA
Cob	-	5.4	7	pF	VCB=10V, f=1MHz

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

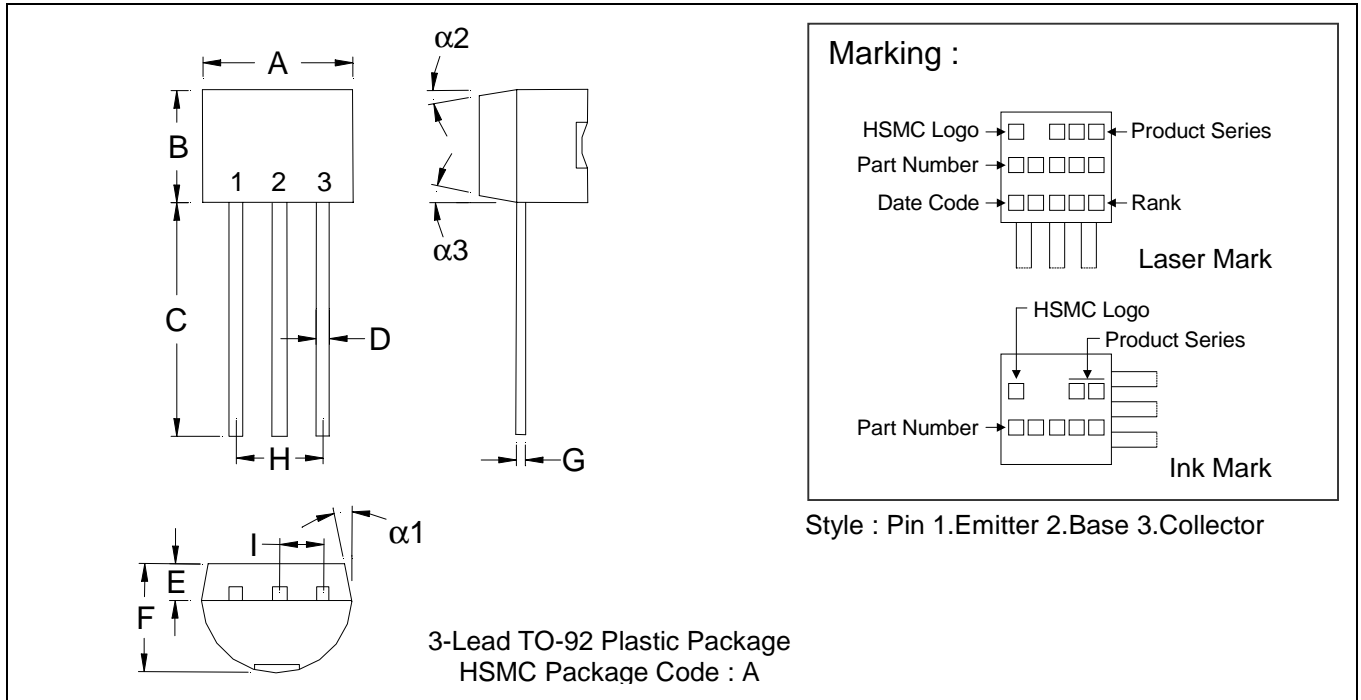


### Characteristics Curve





## TO-92 Dimension



\*: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	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*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

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