

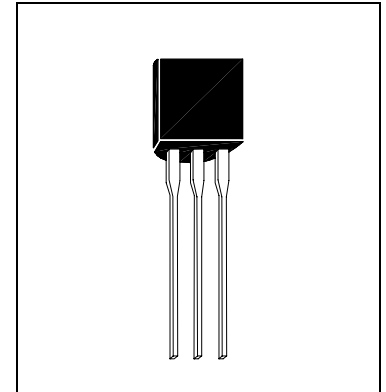


H2N6427

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

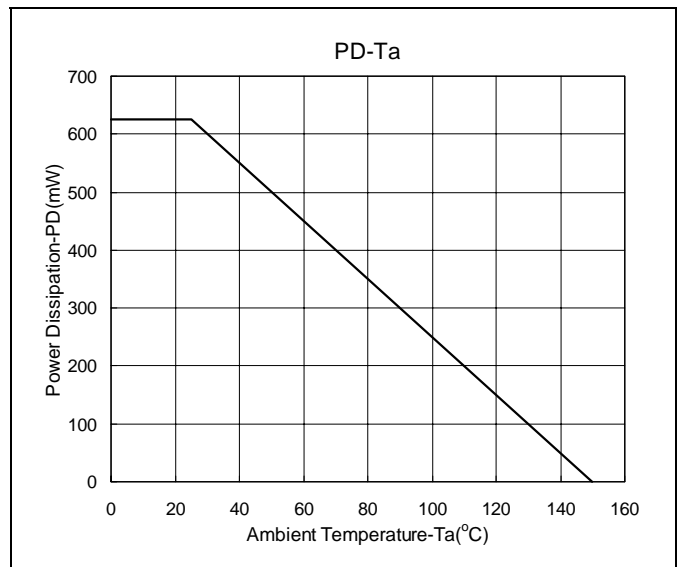
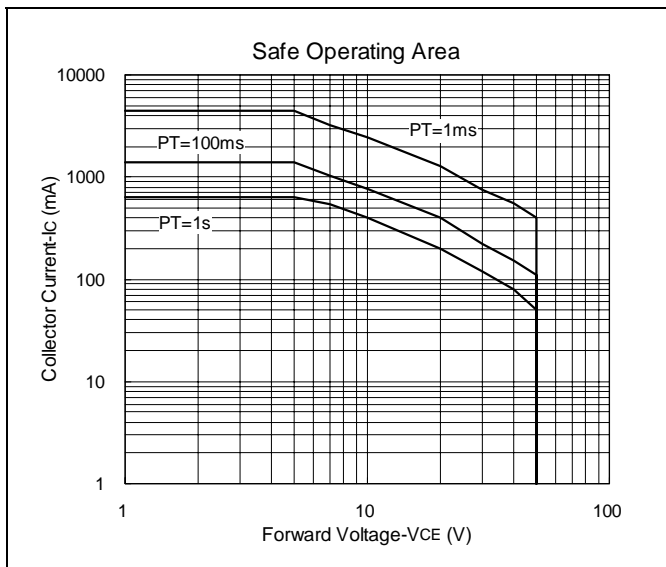
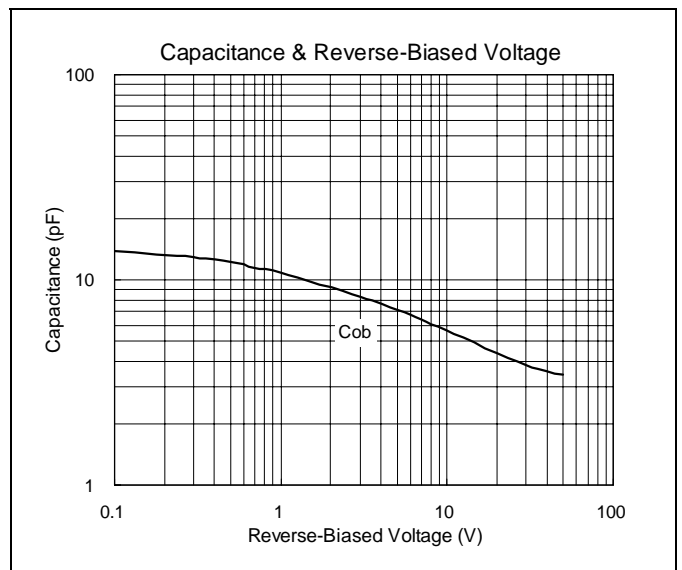
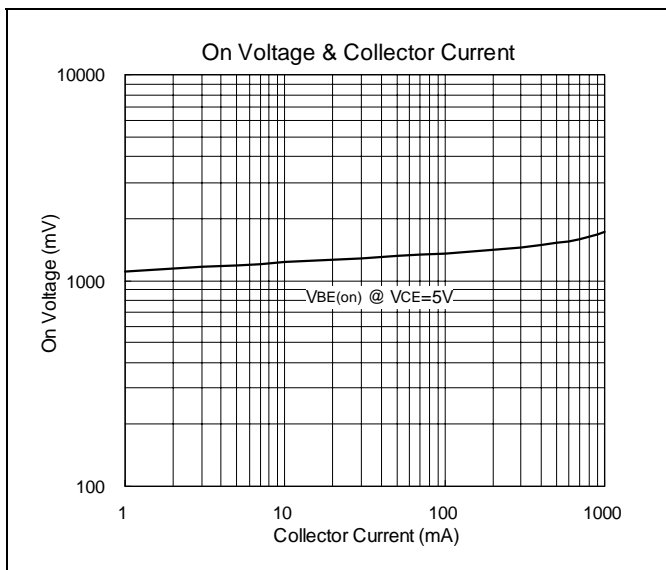
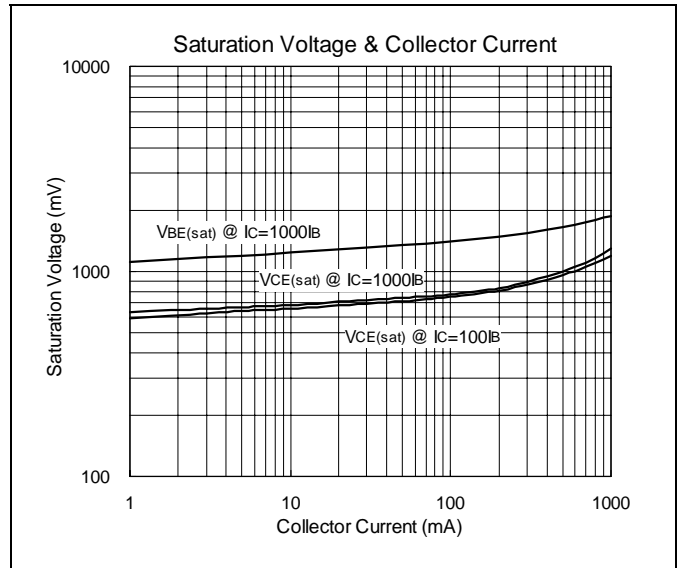
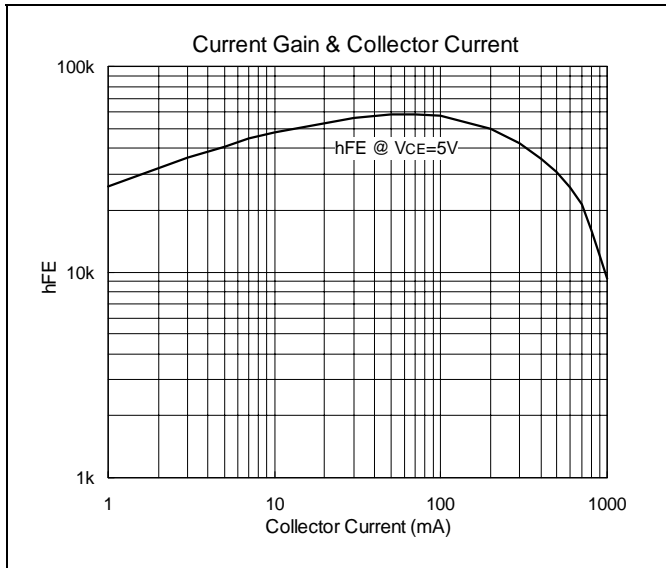
Characteristics (Ta=25°C)

| 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

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

Marking :

HSMC Logo → □ □ □ □ ← Product Series
 Part Number → □ □ □ □ □ □
 Date Code → □ □ □ □ □ □ ← Rank
 Laser Mark

HSMC Logo
 Product Series
 Part Number → □ □ □ □ □ □
 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

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