

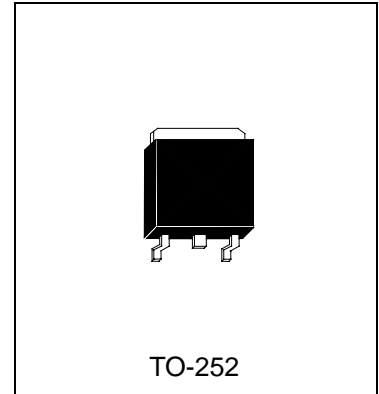


HJ10387

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HJ10387 is designed for general purpose amplifier and low speed switching applications.



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
 - Total Power Dissipation (Ta=25°C) 2 W
- Maximum Voltages and Currents
 - BVCBO Collector to Base Voltage 80 V
 - BVCEO Collector to Emitter Voltage 80 V
 - BVEBO Emitter to Base Voltage 5 V
 - IC Collector Current 10 A

Characteristics (Ta=25°C)

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|------------|------|------|------|------|------------------------|
| *BVCEO | 80 | - | - | V | IC=200mA |
| ICBO | - | - | 100 | uA | VCB=160V |
| IEBO | - | - | 2 | mA | VEB=5V |
| ICEO | - | - | 1 | mA | VCE=80V |
| ICEV | - | - | 300 | uA | VCE=80V, VBE(off)=1.5V |
| *VCE(sat)1 | - | - | 2 | V | IC=5A, IB=10mA |
| *VCE(sat)2 | - | - | 3 | V | IC=10A, IB=100mA |
| *VCE(sat)3 | - | - | 1.5 | V | IC=5A, IB=2.5mA |
| *VBE(sat) | - | - | 2 | V | IC=5A, IB=5mA |
| *VBE(on)1 | - | - | 2.8 | V | VCE=3V, IC=5A |
| *VBE(on)2 | - | - | 4.5 | V | VCE=3V, IC=10A |
| VFEC | - | - | 3 | V | IC=5A |
| *hFE1 | 2 | - | 20 | K | VCE=3V, IC=5A |
| *hFE2 | 100 | - | - | | VCE=3V, IC=10A |

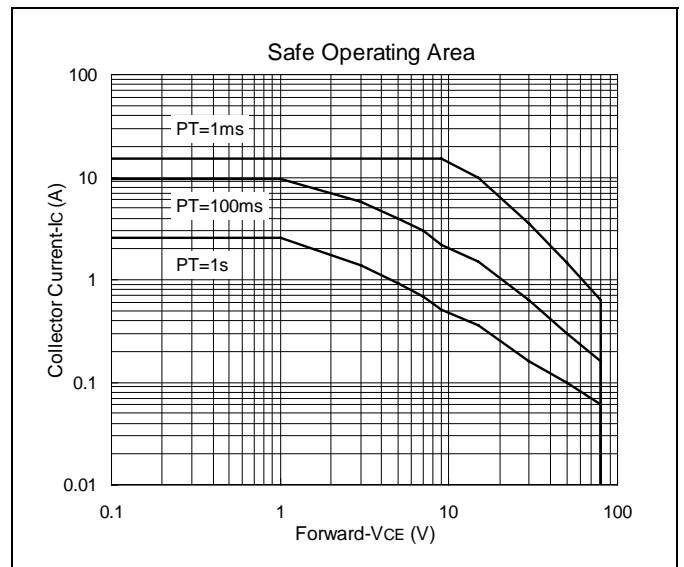
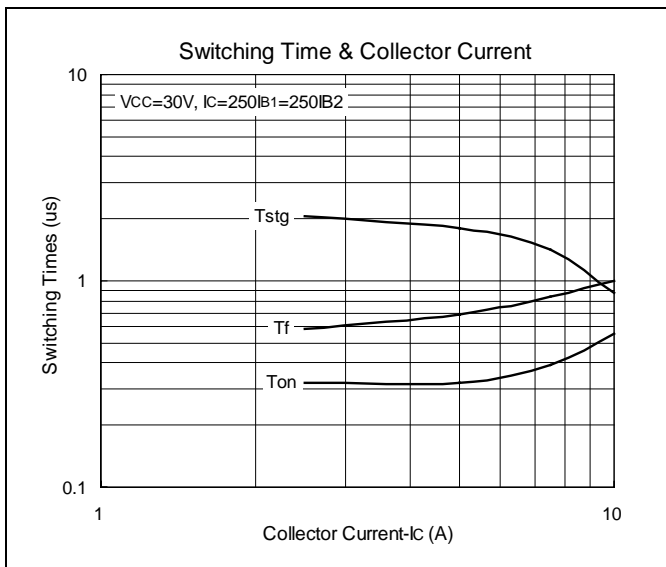
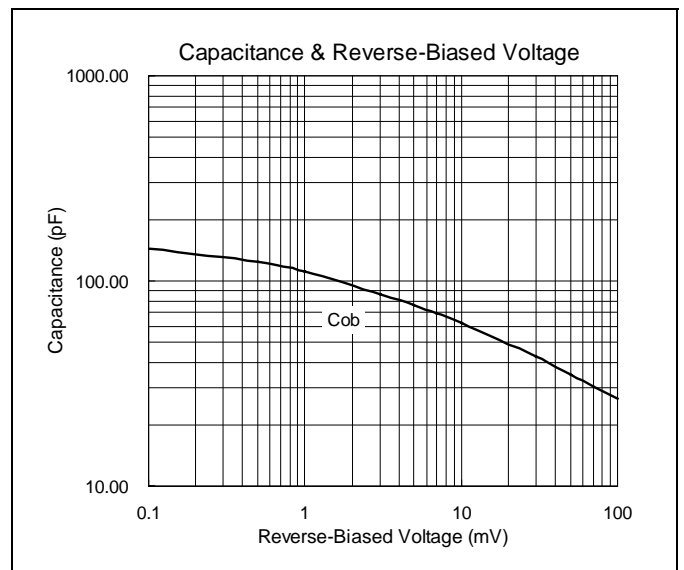
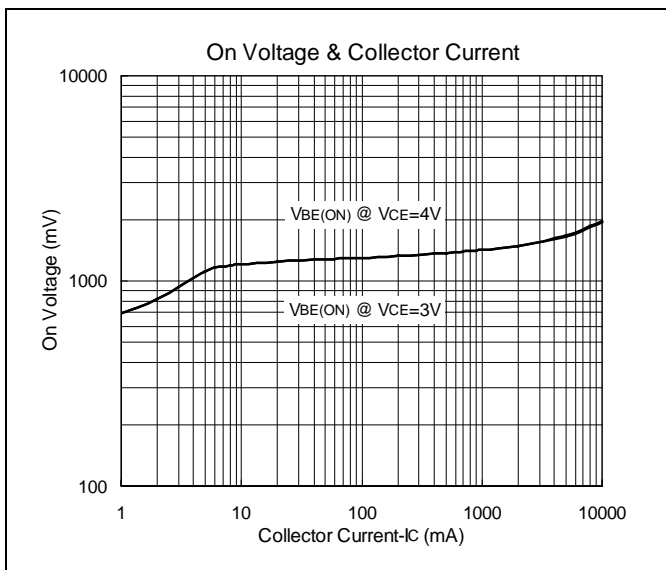
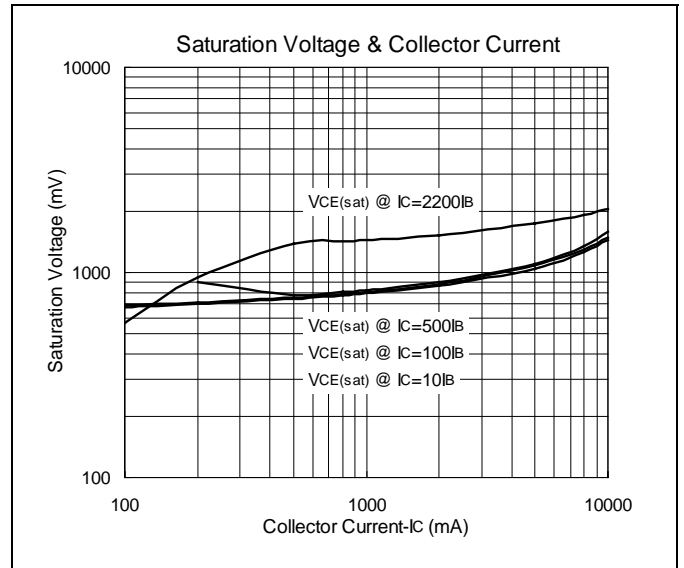
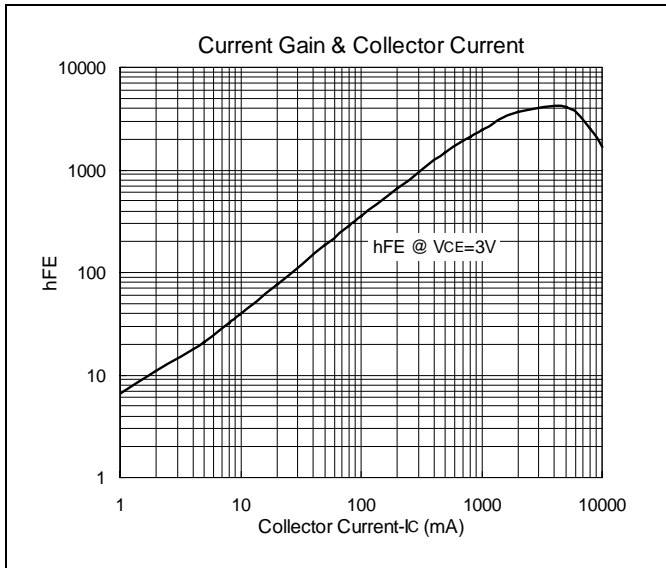
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification Of VCE(sat)1

| Rank | KA | KB | KC | Normal |
|-----------|-------|-------|-------|--------|
| VCE(sat)1 | <1.5V | <1.1V | <1.3V | <2V |

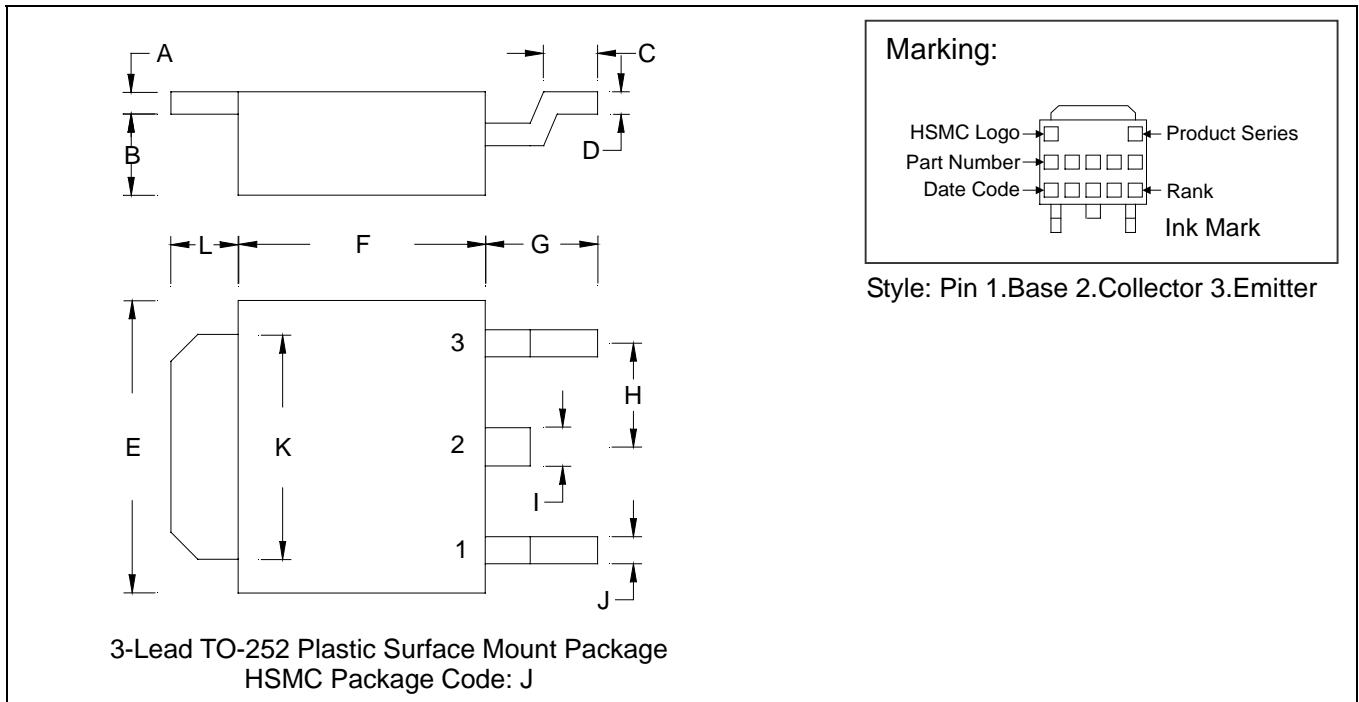


Characteristics Curve





TO-252 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 | 0.0866 | 0.1102 | 2.20 | 2.80 |
| B | 0.0650 | 0.0768 | 1.65 | 1.95 | H | - | *0.0906 | - | *2.30 |
| C | 0.0354 | 0.0591 | 0.90 | 1.50 | I | - | 0.0354 | - | 0.90 |
| D | 0.0177 | 0.0236 | 0.45 | 0.60 | J | - | 0.0315 | - | 0.80 |
| E | 0.2520 | 0.2677 | 6.40 | 6.80 | K | 0.2047 | 0.2165 | 5.20 | 5.50 |
| F | 0.2125 | 0.2283 | 5.40 | 5.80 | L | 0.0551 | 0.0630 | 1.40 | 1.60 |

- Notes: 1.Dimension and tolerance based on our Spec. dated May. 05,1996.
 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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