

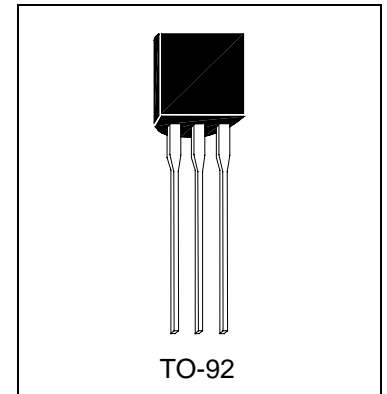


HSB772S

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HSB772S is designed for using in output stage of 0.75W amplifier, voltage regulator, DC-DC converter and driver.



Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 to +150 °C
 Junction Temperature..... +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 750 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage -40 V
 VCEO Collector to Emitter Voltage..... -30 V
 VEBO Emitter to Base Voltage -5 V
 IC Collector Current -3 A

Characteristics (Ta=25°C)

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------|------|------|------|------|-----------------------------|
| BVCBO | -40 | - | - | V | IC=-100uA, IE=0 |
| BVCEO | -30 | - | - | V | IC=-1mA, IB=0 |
| BVEBO | -5 | - | - | V | IE=-10uA, IC=0 |
| ICBO | - | - | -1 | uA | VCB=-30V, IE=0 |
| IEBO | - | - | -1 | uA | VEB=-3V, IC=0 |
| *VCE(sat) | - | -0.3 | -0.5 | V | IC=-2A, IB=-0.2A |
| *VBE(sat) | - | -1 | -2 | V | IC=-2A, IB=-0.2A |
| *hFE1 | 30 | - | - | | VCE=-2V, IC=-20mA |
| *hFE2 | 100 | 160 | 400 | | VCE=-2V, IC=-1A |
| fT | - | 80 | - | MHz | VCE=-5V, IC=-0.1A, f=100MHz |
| Cob | - | 55 | - | pF | VCB=-10V, f=1MHz |

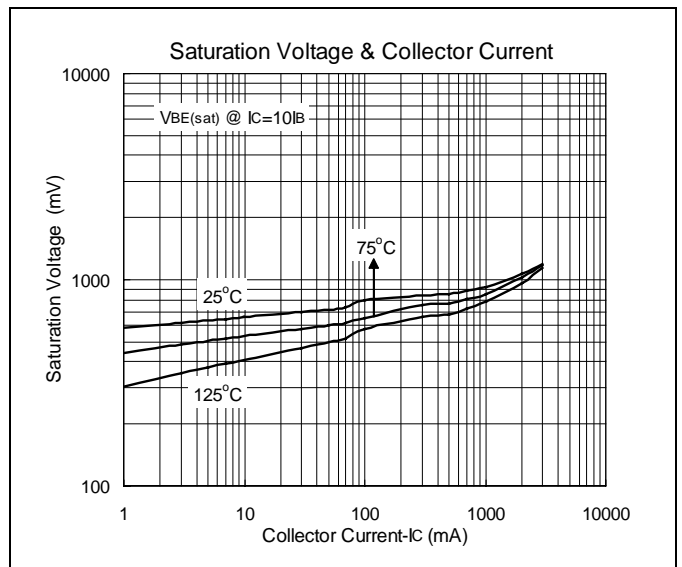
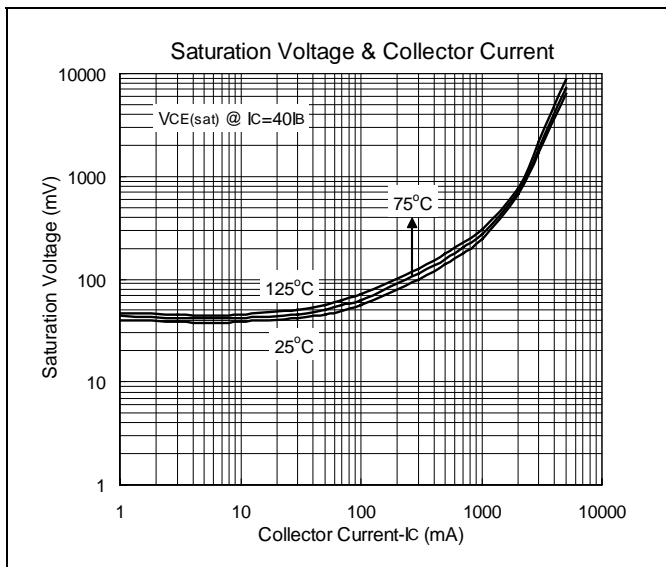
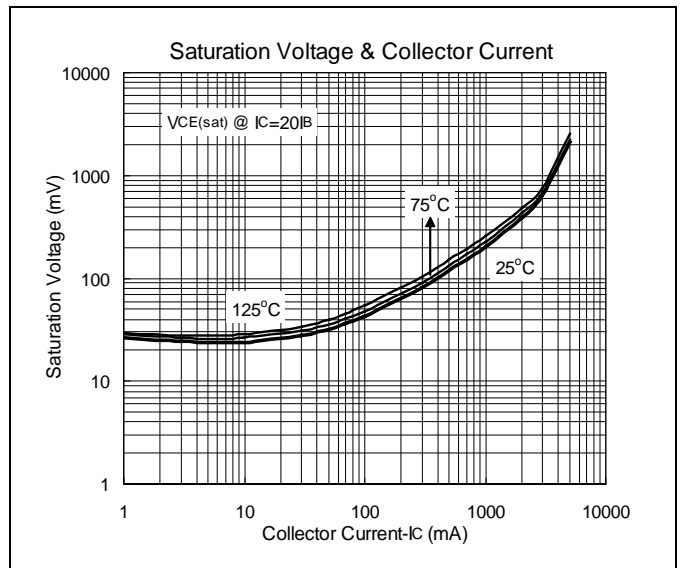
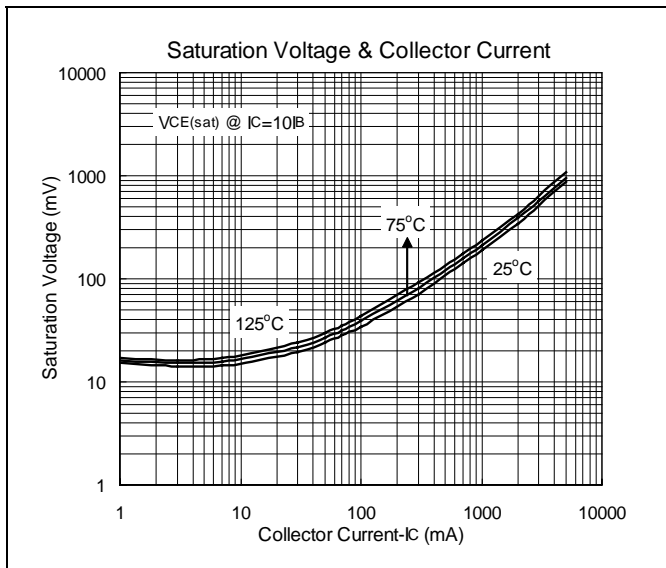
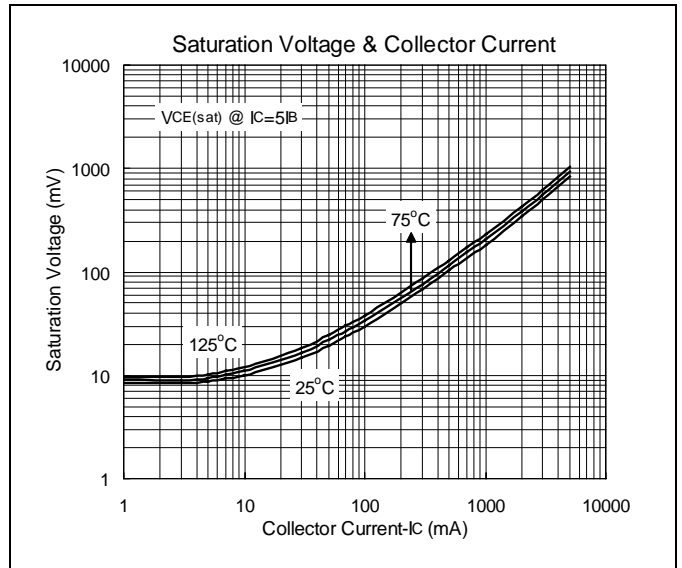
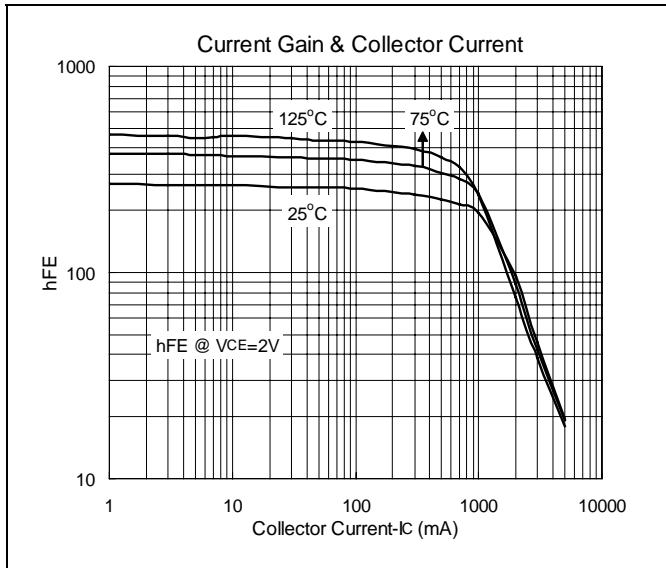
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

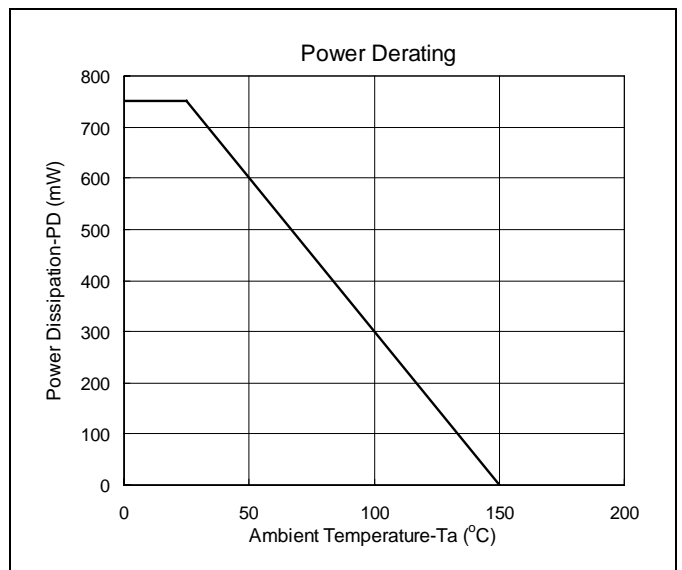
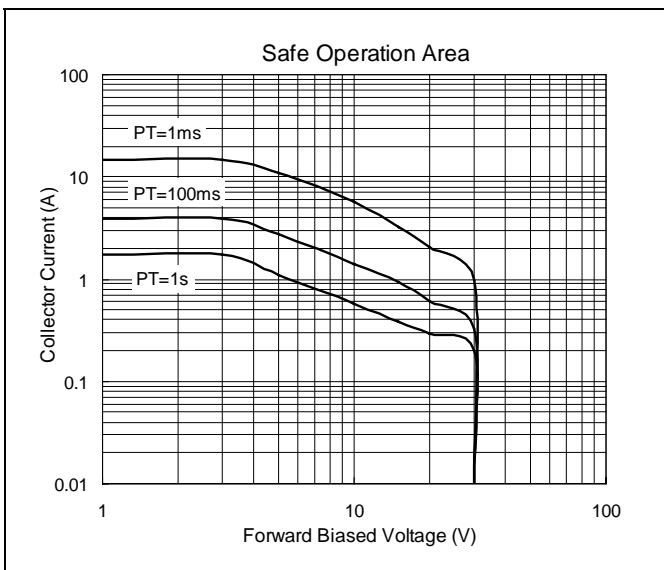
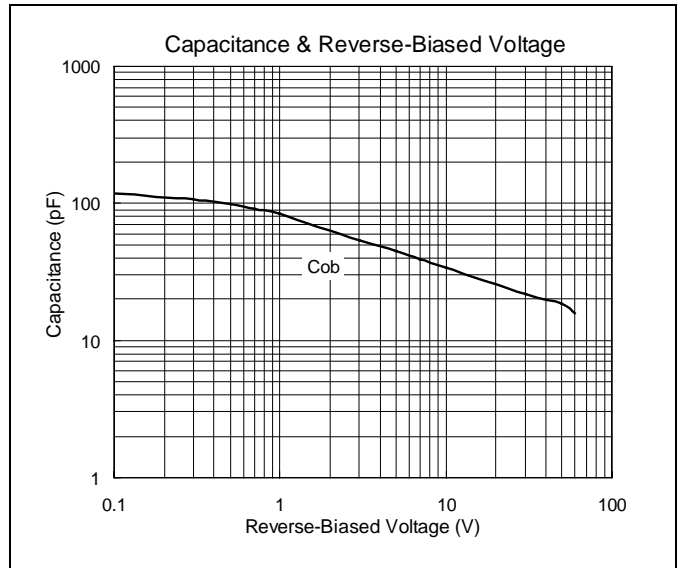
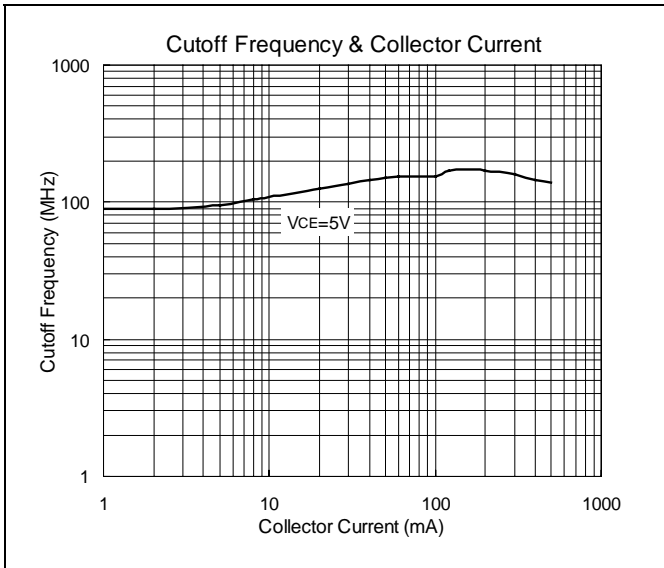
Classification Of hFE2

| Rank | Q | P | E |
|-------|---------|---------|---------|
| Range | 100-200 | 160-320 | 200-400 |



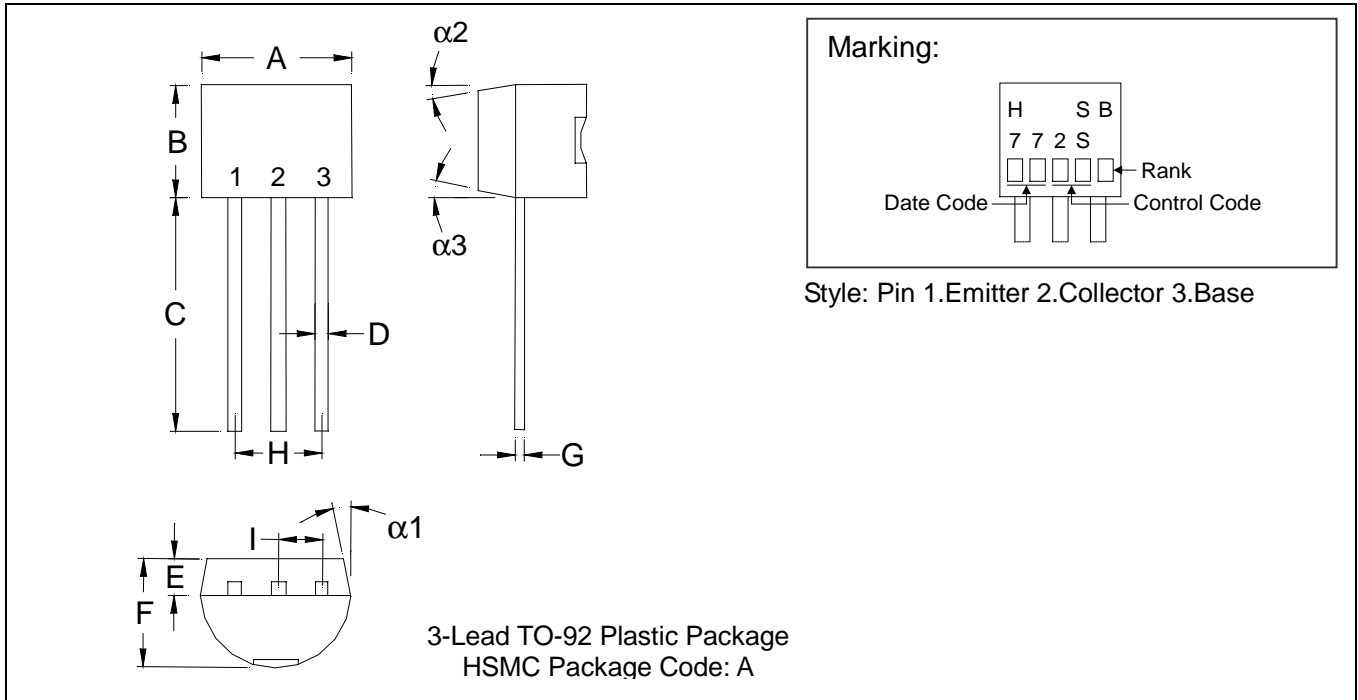
Characteristics Curve







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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