



HSA733SP

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HSA733 is designed for use in driver stage of AF amplifier.

Features

- High hFE and Excellent Linearity: 200 Typ. hFE(VCE=6.0,IC=1.0mA)

Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature..... +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 250 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage -60 V
 VCEO Collector to Emitter Voltage..... -50 V
 VEBO Emitter to Base Voltage -5 V
 IC Collector Current..... -100 mA
 IB Base Current -20 mA

Characteristics (Ta=25°C)

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------|-------|-------|------|------|------------------------|
| BVCBO | -60 | - | - | V | IC=-100uA |
| BVCEO | -50 | - | - | V | IC=-1mA |
| BVEBO | -5 | - | - | V | IE=-10uA |
| ICBO | - | - | -0.1 | uA | VCB=-60V, IC=0 |
| IEBO | - | - | -0.1 | uA | VEB=-5V, IC=0 |
| *VCE(sat) | - | -0.18 | -0.3 | V | IC=-100mA, IB=-10mA |
| VBE(on) | -0.55 | -0.62 | -0.7 | V | IC=-1mA, VCE=-6V |
| *hFE | 90 | 200 | 600 | | VCE=-6V, IC=-1mA |
| fT | 100 | 180 | - | MHz | IC=-1mA, VCE=-6V |
| Cob | - | 4.5 | 6.0 | pF | IE=0, VCB=-10V, f=1MHz |

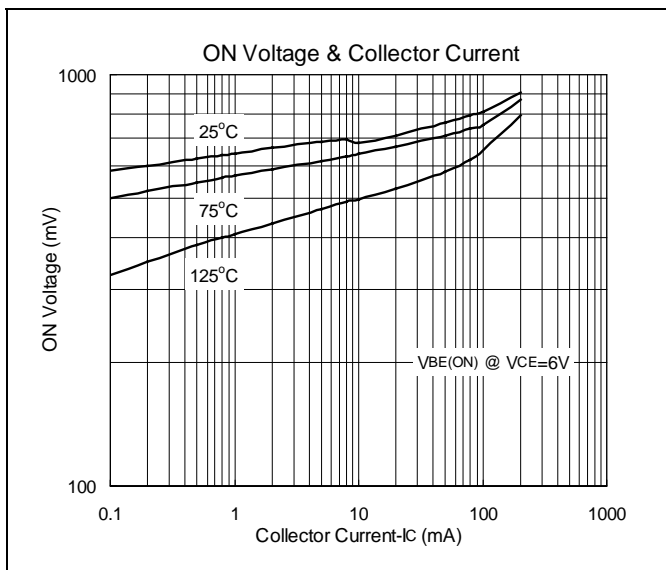
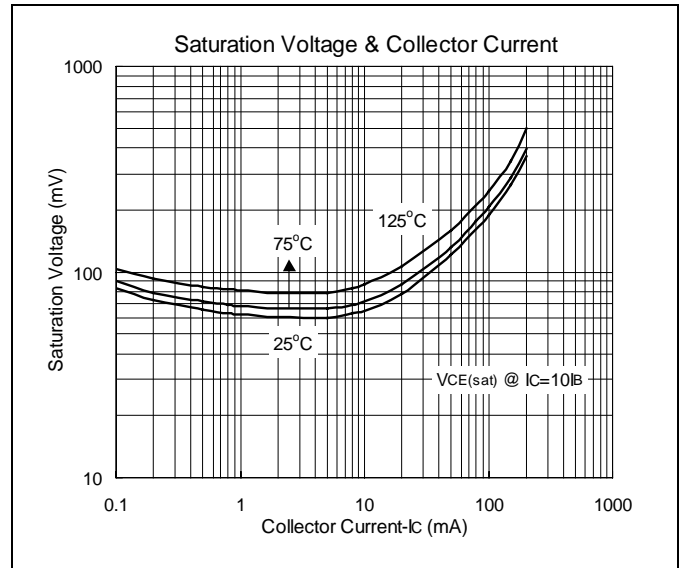
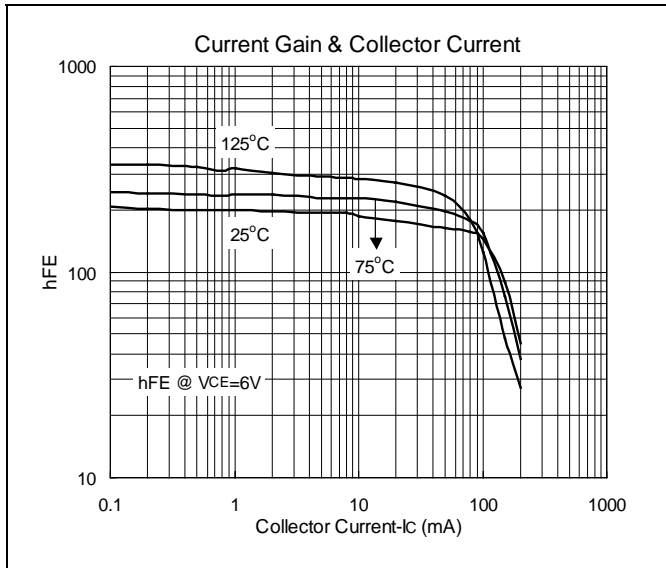
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE1

| Rank | R | Q | P | K |
|-------|--------|---------|---------|---------|
| Range | 90-180 | 135-270 | 200-400 | 300-600 |



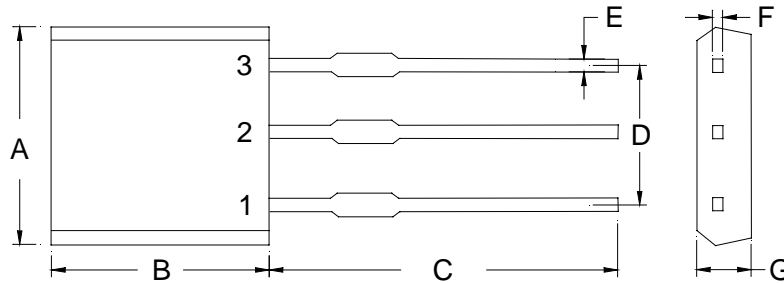
Characteristics Curve





TO-92SP Dimension

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



3-Lead TO-92SP Plastic Package, HSMC Package Code: SP

*: Typical

| DIM | Inches | | Millimeters | | DIM | Inches | | Millimeters | |
|-----|--------|---------|-------------|-------|-----|--------|---------|-------------|-------|
| | Min. | Max. | Min. | Max. | | Min. | Max. | Min. | Max. |
| A | 0.1450 | 0.1650 | 3.70 | 4.20 | E | 0.0160 | 0.0240 | 0.41 | 0.61 |
| B | 0.1063 | 0.1300 | 2.70 | 3.30 | F | - | *0.0150 | - | *0.38 |
| C | 0.5000 | - | 12.7 | - | G | 0.0800 | 0.1050 | 2.03 | 2.67 |
| D | - | *0.1000 | - | *2.54 | | | | | |

- Notes: 1. Dimension and tolerance based on our Spec. dated Sep. 07, 1997.
 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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