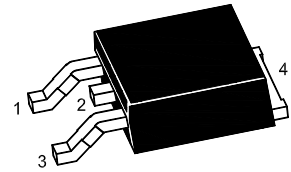


2SB772R-HAF

PNP SILICON EPITAXIAL POWER TRANSISTOR

These devices are intended for use in audio frequency power amplifier and low speed switching applications



1. Base 2. Collector 3. Emitter 4. Collector
TO-252 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|--|----------------|---------------|------------------|
| Collector Base Voltage | $-V_{CB0}$ | 40 | V |
| Collector Emitter Voltage | $-V_{CEO}$ | 30 | V |
| Emitter Base Voltage | $-V_{EBO}$ | 6 | V |
| Collector Current | $-I_C$ | 3 | A |
| Total Power Dissipation @ $T_a = 25\text{ }^\circ\text{C}$ | P_D | 1.25 | W |
| Total Power Dissipation @ $T_c = 25\text{ }^\circ\text{C}$ | P_D | 10 | W |
| Operating and Storage Junction Temperature Range | T_j, T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

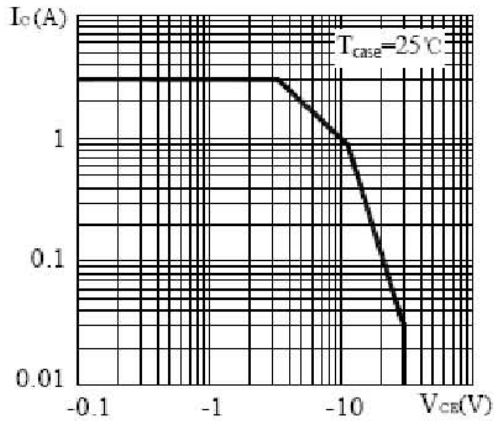
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Min. | Max. | Unit | |
|--|----------------------|----------|------|---------------|---|
| DC Current Gain at $-V_{CE} = 2\text{ V}, -I_C = 1\text{ A}$ | Current Gain Group Q | h_{FE} | 100 | 200 | - |
| | P | h_{FE} | 160 | 320 | - |
| Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$ | $-I_{CB0}$ | - | 1 | μA | |
| Collector Emitter Cutoff Current at $-V_{CE} = 30\text{ V}$ | $-I_{CEO}$ | - | 1 | μA | |
| Emitter Base Cutoff Current at $-V_{EB} = 3\text{ V}$ | $-I_{EBO}$ | - | 1 | μA | |
| Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$ | $-V_{(BR)CB0}$ | 40 | - | V | |
| Collector Emitter Breakdown Voltage at $-I_C = 5\text{ mA}$ | $-V_{(BR)CEO}$ | 30 | - | V | |
| Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$ | $-V_{(BR)EBO}$ | 6 | - | V | |
| Collector Emitter Saturation Voltage at $-I_C = 2\text{ A}, -I_B = 200\text{ mA}$ | $-V_{CE(sat)}$ | - | 0.5 | V | |
| Base Emitter Saturation Voltage at $-I_C = 2\text{ A}, -I_B = 200\text{ mA}$ | $-V_{BE(sat)}$ | - | 2 | V | |
| Current Gain Bandwidth Product at $-V_{CE} = 5\text{ V}, -I_C = 100\text{ mA},$ | f_T | 50 | - | MHz | |

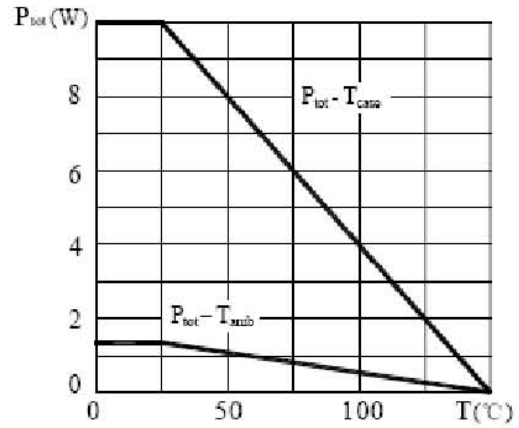
TOP DYNAMIC



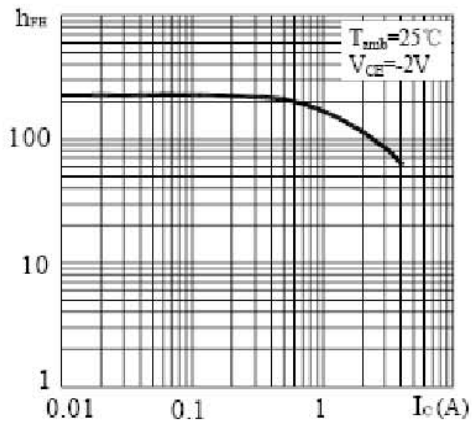
SOA (DC)



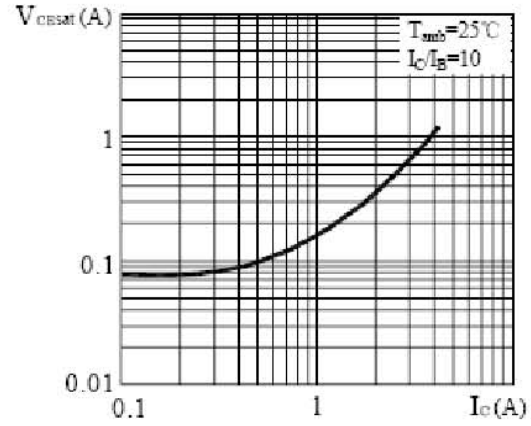
Pc-T



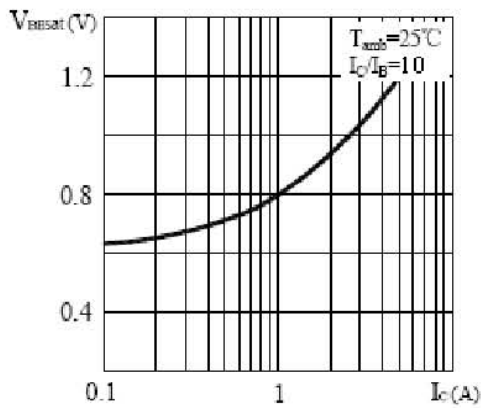
$h_{FE} - I_c$



$V_{CE(sat)} - I_c$

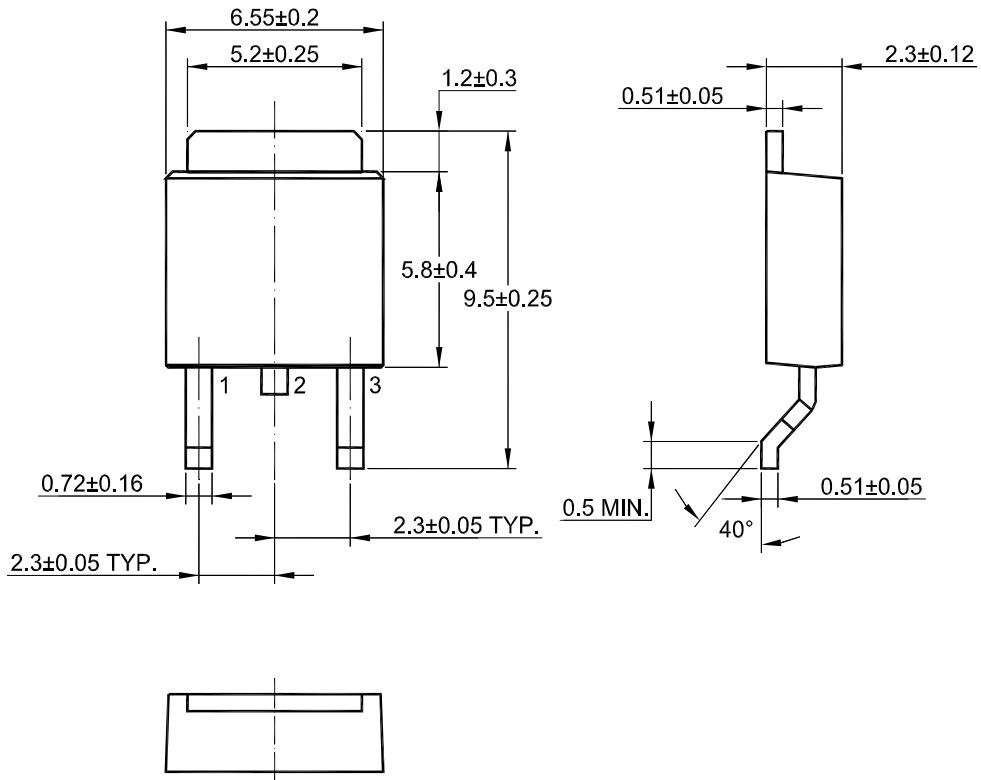


$V_{BE(sat)} - I_c$



2SB772R-HAF

TO-252 PACKAGE OUTLINE



Dimensions in mm

TOP DYNAMIC



Dated: 31/08/2016 D Rev: 04