## ST KSB564

## PNP Silicon Epitaxial Planar Transistor

Audio Frequency Power amplifier applications.

The transistor is subdivided into three group, $\mathrm{O}, \mathrm{Y}$ and G according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19 g

Absolute Maximum Ratings ( $\mathrm{Ta}=25^{\circ} \mathrm{C}$ )

|  | Symbol | Value | Unit |
| :--- | :---: | :---: | :---: |
| Collector Base Voltage | $-\mathrm{V}_{\text {CBO }}$ | 30 | V |
| Collector Emitter Voltage | $-\mathrm{V}_{\text {CEO }}$ | 25 | V |
| Emitter Base Voltage | $-\mathrm{V}_{\text {EBO }}$ | 5 | V |
| Collector Current | $-\mathrm{I}_{\mathrm{C}}$ | 800 | mA |
| Power Dissipation | $\mathrm{P}_{\text {tot }}$ | 625 | mW |
| Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{S}}$ | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |

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Characteristics at $\mathrm{T}_{\mathrm{amb}}=25^{\circ} \mathrm{C}$

|  | Symbol | Min. | Typ. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DC Current Gain at $-V_{C E}=1 \mathrm{~V},-\mathrm{I}_{\mathrm{C}}=100 \mathrm{~mA}$ <br> Current Gain Group | $\begin{aligned} & \mathrm{h}_{\mathrm{FE}} \\ & \mathrm{~h}_{\mathrm{FE}} \\ & \mathrm{~h}_{\mathrm{FE}} \end{aligned}$ | $\begin{gathered} 70 \\ 120 \\ 200 \end{gathered}$ | - | $\begin{aligned} & 140 \\ & 240 \\ & 400 \end{aligned}$ |  |
| Collector Emitter Breakdown Voltage at $-\mathrm{I}_{\mathrm{C}}=10 \mathrm{~mA}$ | $-\mathrm{V}_{\text {(BR)CEO }}$ | 25 | - | - | V |
| Collector Base Breakdown Voltage at $-I_{C}=100 \mu \mathrm{~A}$ | $-\mathrm{V}_{\text {(BR) }}$ CBO | 30 | - | - | V |
| Emitter Base Breakdown Voltage at $I_{E}=100 \mu \mathrm{~A}$ | $-\mathrm{V}_{\text {(BR)EBO }}$ | 5 | - | - | V |
| Collector Cutoff Current at $-\mathrm{V}_{\mathrm{CB}}=30 \mathrm{~V}$ | $-_{\text {cbo }}$ | - | - | 0.1 | $\mu \mathrm{A}$ |
| Collector Saturation Voltage at $-I_{C}=500 \mathrm{~mA},-I_{B}=50 \mathrm{~mA}$ | $-\mathrm{V}_{\mathrm{CE} \text { (sat) }}$ | - | - | 0.5 | V |
| Base Saturation Voltage at $-I_{C}=500 \mathrm{~mA},-I_{\mathrm{B}}=50 \mathrm{~mA}$ | $-V_{\text {BE(sat) }}$ | - | - | 1.2 | V |
| Collector Output Capacitance at $-\mathrm{V}_{\mathrm{CB}}=6 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ | $\mathrm{C}_{\text {ов }}$ | - | 18 | - | pF |
| Transition Frequency at $-\mathrm{V}_{\mathrm{CE}}=6 \mathrm{~V},-\mathrm{I}_{\mathrm{C}}=10 \mathrm{~mA}$ | $\mathrm{f}_{\text {T }}$ |  | 110 |  | MHz |

