



# 2SB633

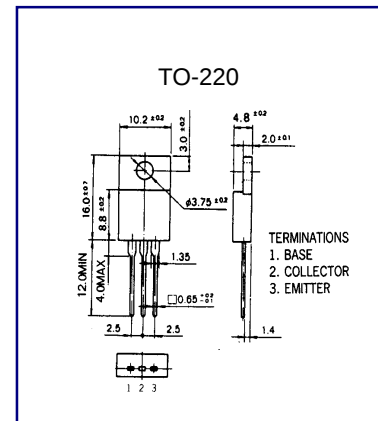
# PNP EPITAXIAL SILICON TRANSISTOR

## LOW FREQUENCY POWER AMPLIFIER

- Complement to 2SD613

### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ )

| Characteristic                                     | Symbol    | Rating  | Unit               |
|----------------------------------------------------|-----------|---------|--------------------|
| Collector-Base Voltage                             | $V_{CB0}$ | -100    | V                  |
| Collector-Emitter Voltage                          | $V_{CE0}$ | -85     | V                  |
| Emitter-Base voltage                               | $V_{EB0}$ | -5      | V                  |
| Collector Current (DC)                             | $I_C$     | -6      | A                  |
| Collector Dissipation ( $T_c=25^{\circ}\text{C}$ ) | $P_C$     | 40      | W                  |
| Junction Temperature                               | $T_j$     | 150     | $^{\circ}\text{C}$ |
| Storage Temperature                                | $T_{stg}$ | -50~150 | $^{\circ}\text{C}$ |



### ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ )

| Characteristic                        | Symbol        | Test Condition                               | Min | Typ | Max  | Unit          |
|---------------------------------------|---------------|----------------------------------------------|-----|-----|------|---------------|
| Collector Cutoff Current              | $I_{CBO}$     | $V_{CB} = -100\text{V}$ , $I_E = 0$          |     |     | -10  | $\mu\text{A}$ |
| Emitter Cutoff Current                | $I_{EBO}$     | $V_{EB} = -5\text{V}$ , $I_C = 0$            |     |     | 10   | $\mu\text{A}$ |
| DC Current Gain                       | $h_{FE1}$     | $V_{CE} = -5\text{V}$ , $I_C = -1\text{A}$   | 40  |     | 320  |               |
| Collector- Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -4\text{A}$ , $I_B = -0.4\text{A}$    |     |     | -2.0 | V             |
| Current Gain Bandwidth Product        | $f_T$         | $V_{CE} = -2\text{V}$ , $I_C = -0.5\text{A}$ |     | 8   |      | MHZ           |