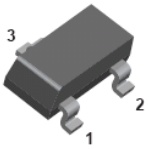
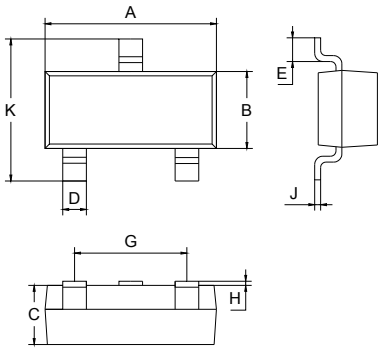
# 2SC3125

## SOT-23 Bipolar Transistor(NPN)

### FEATURES

- Low collector to emitter saturation voltage.
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting.




### APPLICATIONS

- For hybrid IC,small type machine low frequency voltage amplify application.

### ORDERING INFORMATION

| Type No. | Marking | Package Code |
|---|---|---|
| 2SC3125 | HH | SOT-23 |

### MAXIMUM RATING @ Ta=25℃ unless otherwise specified

| Symbol | Parameter | Value | Units |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | 30 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | 25 | V |
| $V_{EBO}$ | Emitter-Base Voltage | 4 | V |
| $I_C$ | Collector Current -Continuous | 50 | mA |
| $I_B$ | Base Current | 25 | mA |
| $P_C$ | Collector Dissipation | 150 | mW |
| $T_j, T_{stg}$ | Junction and Storage Temperature | -55 to +125 | ℃ |

| SOT-23 | | |
|---|---|---|
| Dim | Min | Max |
| A | 2.70 | 3.10 |
| B | 1.10 | 1.50 |
| C | 1.0 Typical | |
| D | 0.4 Typical | |
| E | 0.35 | 0.48 |
| G | 1.80 | 2.00 |
| H | 0.02 | 0.1 |
| J | 0.1 Typical | |
| K | 2.20 | 2.60 |
| All Dimensions in mm | | |

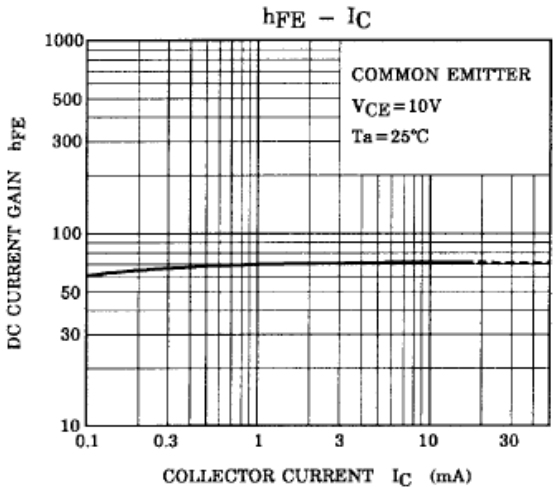
### ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

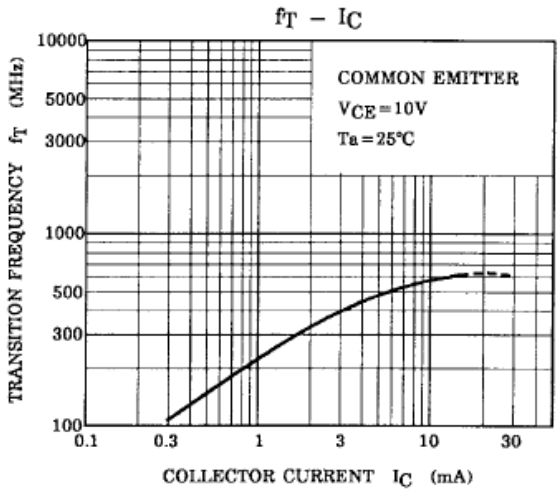
| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C$=10mA,$I_B$=0 | 25 | | | V |
| Collector cut-off current | $I_{CBO}$ | $V_{CB}$=30V,$I_E$=0 | | | 0.1 | μA |
| Emitter cut-off current | $I_{EBO}$ | $V_{EB}$=3V,$I_C$=0 | | | 0.1 | μA |
| DC current gain | $h_{FE}$ | $V_{CE}$=10V,$I_C$=10mA | 20 | 70 | 200 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C$=15mA, $I_B$=1.5mA | | | 0.2 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C$=15mA, $I_B$=1.5mA | | | 1.5 | V |
| Transition frequency | $f_T$ | $V_{CE}$=10V, $I_C$= 10mA | 250 | 600 | | MHz |
| Collector-base output capacitance | $C_{ob}$ | $V_{CB}$=10V, $I_E$=0,f=1MHz | | 1.1 | 1.6 | MHz |

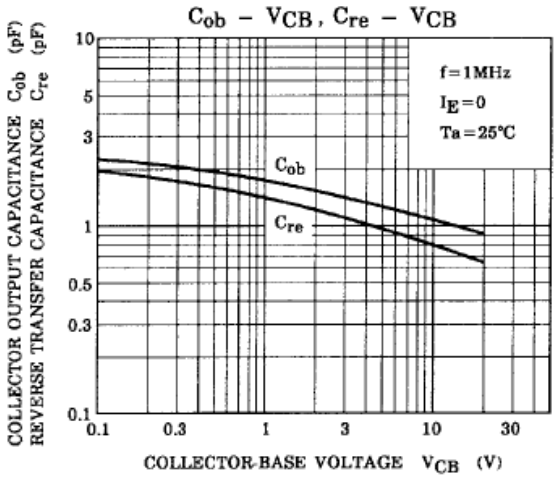
# 2SC3125

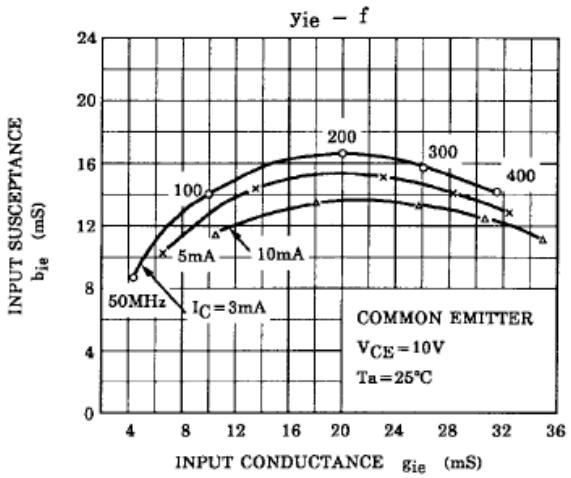
**SOT-23 Bipolar Transistor(NPN)**

## TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified




| Package | Reel | Reel Size | Box | Box Size(mm) | Carton | Carton Size(mm) |
|---|---|---|---|---|---|---|
| SOT-23 | 3000pcs | 7inch | 45,000pcs | 203×203×195 | 180,000pcs | 438×438×220 |