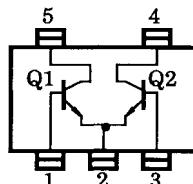


## DUAL TRANSISTOR (PNP+PNP)

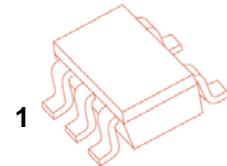
### Features

- Small package (dual type)
- High voltage and high current
- High  $h_{FE}$
- Excellent  $h_{FE}$  linearity
- Complementary to 2SC4944

**MARKING: SY SGR**



**SOT-353**



### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

| Symbol    | Parameter                     | Value      | Units            |
|-----------|-------------------------------|------------|------------------|
| $V_{CBO}$ | Collector-Base Voltage        | -50        | V                |
| $V_{CEO}$ | Collector-Emitter Voltage     | -50        | V                |
| $V_{EBO}$ | Emitter-Base Voltage          | -5         | V                |
| $I_c$     | Collector Current -Continuous | -150       | mA               |
| $P_c$     | Collector Power Dissipation   | 200        | mW               |
| $T_J$     | Junction Temperature          | 150        | $^\circ\text{C}$ |
| $T_{stg}$ | Storage Temperature           | -55 to 150 | $^\circ\text{C}$ |

### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter                            | Symbol               | Test conditions                            | Min | Typ | Max  | Unit          |
|--------------------------------------|----------------------|--|-----|-----|------|---------------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$        | $I_C=-100\mu\text{A}, I_E=0$               | -50 |     |      | V             |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$        | $I_C=-1\text{mA}, I_B=0$                   | -50 |     |      | V             |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$        | $I_E=-10\mu\text{A}, I_C=0$                | -5  |     |      | V             |
| Collector cut-off current            | $I_{CBO}$            | $V_{CB}=-50\text{V}, I_E=0$                |     |     | -0.1 | $\mu\text{A}$ |
| Emitter cut-off current              | $I_{EBO}$            | $V_{EB}=-5\text{V}, I_C=0$                 |     |     | -0.1 | $\mu\text{A}$ |
| DC current gain                      | $h_{FE}$             | $V_{CE}=-6\text{V}, I_C=-2\text{mA}$       | 120 | 400 |      |               |
| Collector-emitter saturation voltage | $V_{CE(\text{sat})}$ | $I_C=-100\text{mA}, I_B=-10\text{mA}$      |     |     | -0.3 | V             |
| Transition frequency                 | $f_T$                | $V_{CE}=-10\text{V}, I_C=-1\text{mA}$      | 80  |     |      | MHz           |
| Collector output capacitance         | $C_{ob}$             | $V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$ |     |     | 7    | pF            |

### CLASSIFICATION OF $h_{FE}$

|         |         |         |
|---------|---------|---------|
| Rank    | Y       | GR      |
| Range   | 120-240 | 200-400 |
| Marking | SY      | SGR     |