



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

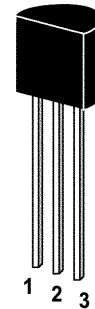
ST 2SC1959

NPN Silicon Epitaxial Planar Transistor

for switching, driver stage and audio frequency low power amplifier applications.

The transistor is subdivided into three groups, O, Y and G, according to its DC current gain.

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



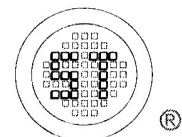
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package

Weight approx. 0.19g

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

| | Symbol | Value | Unit |
|---------------------------|-----------|-------------|------------------|
| Collector Base Voltage | V_{CBO} | 35 | V |
| Collector Emitter Voltage | V_{CEO} | 30 | V |
| Emitter Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 500 | mA |
| Base Current | I_B | 100 | mA |
| Power Dissipation | P_{tot} | 500 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_s | -55 to +150 | $^\circ\text{C}$ |



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Dated : 07/12/2002



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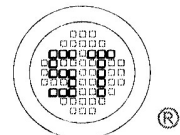
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ST 2SC1959

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

| | Symbol | Min. | Typ. | Max. | Unit |
|------------------------------|---------------|------|------|------|---------|
| DC Current Gain | | | | | |
| at $V_{CE}=1V, I_C=100mA$ | | | | | |
| Current Gain Group O | h_{FE} | 70 | - | 140 | - |
| Y | h_{FE} | 120 | - | 240 | - |
| G | h_{FE} | 200 | - | 400 | - |
| at $V_{CE}=6V, I_C=400mA$ | h_{FE} | 25 | - | - | - |
| Base Emitter Voltage | | | | | |
| at $I_C=100mA, V_{CE}=1V$ | V_{BE} | - | 0.8 | 1 | V |
| Emitter Cutoff Current | | | | | |
| at $V_{EB}=5V$ | I_{EBO} | - | - | 0.1 | μA |
| Collector Cutoff Current | | | | | |
| at $V_{CB}=35V$ | I_{CBO} | - | - | 0.1 | μA |
| Collector Saturation Voltage | | | | | |
| at $I_C=100mA, I_B=10mA$ | $V_{CE(sat)}$ | - | 0.1 | 0.25 | V |
| Transition Frequency | | | | | |
| at $V_{CE}=6V, I_C=20mA$ | f_T | - | 300 | - | MHz |
| Output Capacitance | | | | | |
| at $V_{CB}=6V, f=1MHz$ | C_{OB} | - | 7 | - | pF |



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