

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL PLANAR TYPE

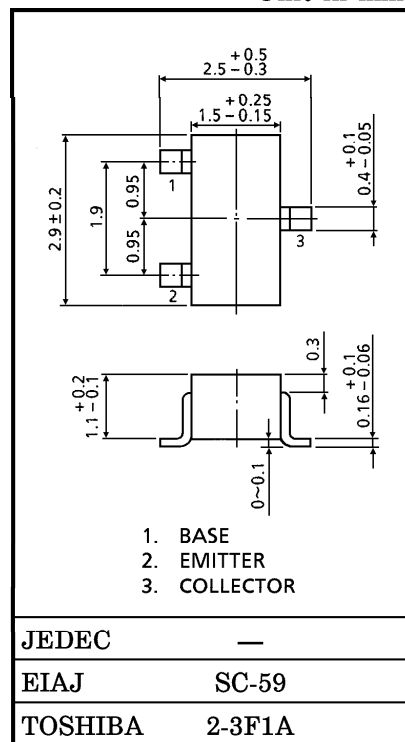
2SC3124

TV TUNER, VHF OSCILLATOR APPLICATIONS

Unit in mm

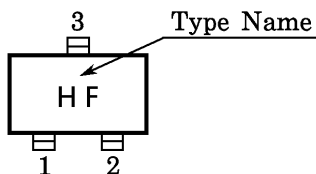
MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|------------------|---------|------|
| Collector-Base Voltage | V _{CB0} | 30 | V |
| Collector-Emitter Voltage | V _{CEO} | 15 | V |
| Emitter-Base Voltage | V _{EBO} | 3 | V |
| Collector Current | I _C | 50 | mA |
| Base Current | I _B | 25 | mA |
| Collector Power Dissipation | P _C | 150 | mW |
| Junction Temperature | T _j | 125 | °C |
| Storage Temperature Range | T _{stg} | -55~125 | °C |



Weight : 0.012g

Marking



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------------------------|------------------------------------|--|------|------|------|------|
| Collector Cut-off Current | I _{CB0} | V _{CB} = 15V, I _E = 0 | — | — | 0.1 | μA |
| Emitter Cut-off Current | I _{EBO} | V _{EB} = 3V, I _C = 0 | — | — | 1.0 | μA |
| Collector-Emitter Breakdown Voltage | V (BR) CEO | I _C = 1mA, I _B = 0 | 15 | — | — | V |
| DC Current Gain | h _{FE} | V _{CE} = 3V, I _C = 8mA | 40 | 100 | 200 | — |
| Transition Frequency | f _T | V _{CE} = 10V, I _C = 8mA | 650 | 1100 | — | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} = 10V, I _E = 0, f = 1MHz | — | 0.9 | 1.3 | pF |
| Collector-Base Time Constant | C _c · r _{bb} ' | V _{CB} = 10V, I _C = 8mA, f = 30MHz | — | 7 | 12 | ps |

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