

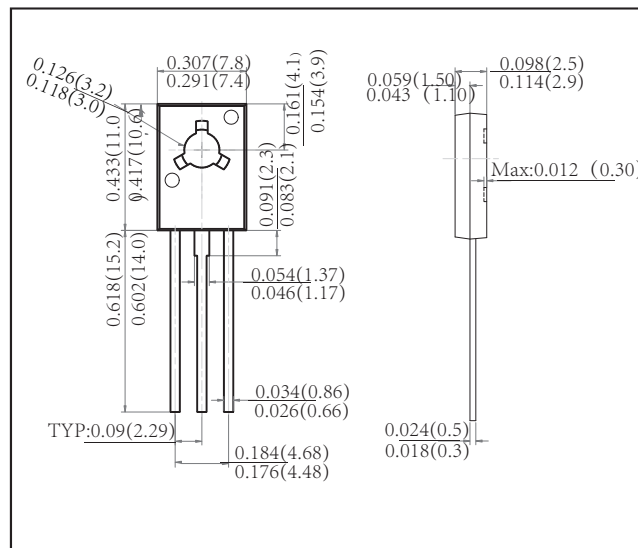
## TO-18 Plastic-Encapsulate Transistors

### FEATURES

- Low Frequency Power Amplifier
- High Current
- TRANSISTOR (NPN)

### MECHANICAL DATA

- Case style: TO-18 molded plastic
- Mounting position: any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter                     | Symbol    | Value     | Unit |
|-------------------------------|-----------|-----------|------|
| Collector- Base Voltage       | $V_{CBO}$ | 180       | V    |
| Collector-Emitter Voltage     | $V_{CEO}$ | 120       | V    |
| Emitter-Base Voltage          | $V_{EBO}$ | 5         | V    |
| Collector Current -Continuous | $I_C$     | 1.5       | A    |
| Collector Dissipation         | $P_C$     | 1         | W    |
| Junction Temperature          | $T_J$     | 150       | °C   |
| Storage Temperature           | $T_{stg}$ | -55 ~+150 | °C   |

| Parameter                            | Symbol        | Test Conditions             | Min | Typ | Max | Unit    |
|--------------------------------------|---------------|-----------------------------|-----|-----|-----|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C=1mA, I_E=0$            | 180 |     |     | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C=10mA, I_B=0$           | 120 |     |     | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E=1mA, I_C=0$            | 5   |     |     | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB}=160V, I_E=0$        |     |     | 10  | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB}=4V, I_C=0$          |     |     | 10  | $\mu A$ |
| DC current gain                      | $h_{FE(1)}$   | $V_{CE}=5V, I_C=150mA$      | 60  |     | 320 |         |
|                                      | $h_{FE(2)}$   | $V_{CE}=5V, I_C=500mA$      | 30  |     |     |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=500mA, I_B=50mA$       |     |     | 1   | V       |
| Base-emitter voltage                 | $V_{BE}$      | $V_{CE}=5V, I_C=150mA$      |     |     | 1.5 | V       |
| Transition frequency                 | $f_T$         | $V_{CE}=5V, I_C=500mA$      |     | 140 |     | MHz     |
| Collector output capacitance         | $C_{ob}$      | $V_{CB}=10V, I_E=0, f=1MHz$ |     | 14  |     | pF      |

## RATINGS AND CHARACTERISTIC CURVES

