

# TRANSISTOR (PNP)

# Plastic-Encapsulate Transistor

## FEATURES

Power dissipation

$$P_{CM}: 0.8W (T_{amb}=25^{\circ}C)$$

Collector current

$$I_{CM}: -0.05A$$

Collector-base voltage

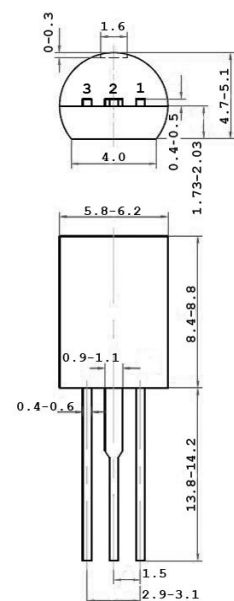
$$V_{(BR)CBO}: -150V$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^{\circ}C \text{ to } +150^{\circ}C$$

## TO-92MOD

1. EMITTER
2. COLLECTOR
3. BASE



UNIT:mm

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

## ELECTRICAL CHARACTERISTICS

| Parameters                           | Symbol        | Test conditions          | MIN  | MAX  | UNIT    |
|--------------------------------------|---------------|--------------------------|------|------|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C=-100 \mu A, I_E=0$  | -150 |      | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C=-5mA, I_B=0$        | -150 |      | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E=-10 \mu A, I_C=0$   | -5   |      | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB}=-150V, I_E=0$    |      | -0.1 | $\mu A$ |
| DC current gain                      | $h_{FE}$      | $V_{CE}=-5V, I_C=-10mA$  | 40   | 240  |         |
| Collector-emitter saturation voltage | $V_{CEsat}$   | $I_C=-10mA, I_B=-1mA$    |      | -0.8 | V       |
| Transition frequency                 | $f_r$         | $V_{CE}=-30V, I_C=-10mA$ | 80   |      | MHz     |

## CLASSIFICATION OF $h_{FE}$

| Rank  | R     | O      | Y       |
|-------|-------|--------|---------|
| Range | 40-80 | 70-140 | 120-240 |