

TRANSISTOR (PNP)
Plastic-Encapsulate Transistor
FEATURES

Power dissipation

$$P_{CM} : 0.625W \text{ (Tamb=25°C)}$$

Collector current

$$I_{CM} : -1.5A$$

Collector-base Voltage

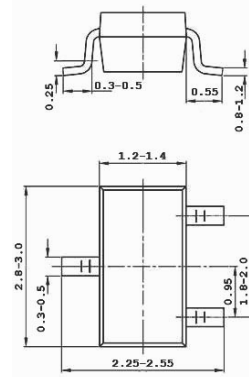
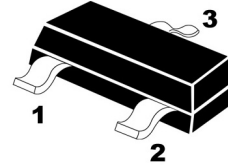
$$V_{(BR)CBO} : -40 V$$

Operating and storage junction temperature range

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

MARKING:Y2D
SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



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 | $V_{(BR)CBO}$ | $I_C = -100 \mu A, I_E = 0$ | -40 | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -0.1mA, I_B = 0$ | -25 | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -100 \mu A, I_C = 0$ | -6 | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -40V, I_E = 0$ | | -0.1 | μA |
| Collector cut-off current | I_{CEO} | $V_{CE} = -20V, I_B = 0$ | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5V, I_C = 0 \text{ mA}$ | | -0.1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -1V, I_C = -100mA$ | 120 | 350 | |
| | $h_{FE(2)}$ | $V_{CE} = -1V, I_C = -800mA$ | 40 | | |
| Collector-emitter saturation voltage | V_{CEsat} | $I_C = -800mA, I_B = -80mA$ | | -0.5 | V |
| Base-emitter saturation voltage | V_{BEsat} | $I_C = -800mA, I_B = -80mA$ | | -1.2 | V |
| Base-emitter voltage | V_{BEF} | $I_E = -1.5A$ | | -1.6 | V |
| Transition frequency | f_r | $V_{CE} = -10V, I_C = -50mA, f = 30MHz$ | 100 | | MHz |

CLASSIFICATION OF $h_{FE(1)}$

| Rank | C | D |
|-------|---------|---------|
| Range | 120-200 | 200-350 |

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