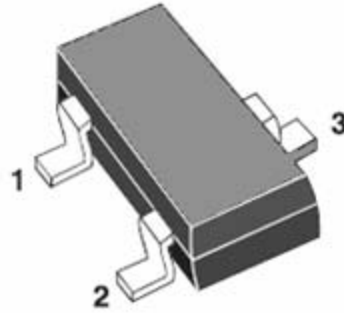


Features

- ◆ Power dissipation
 $P_{CM}: 0.3W (T_A = 25^\circ C)$
- ◆ Collector current
 $I_C: 1.5A$
- ◆ Collector-base voltage
 $V_{(BR)CBO}: 40V$
- ◆ Operating and storage junction temperature range
 $T_J, T_{STG}: -55^\circ C \text{ to } +150^\circ C$

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1.BASE 2.EMITTER 3.COLLECTOR

Marking:

Y1

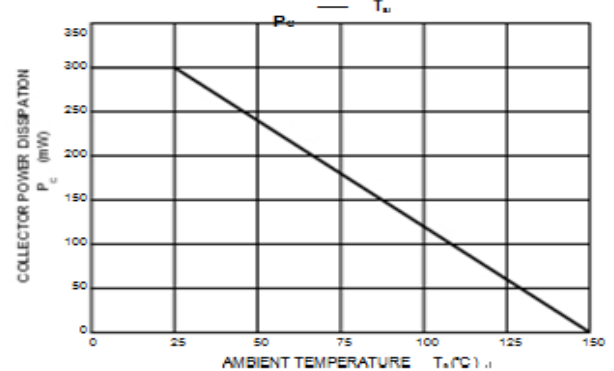
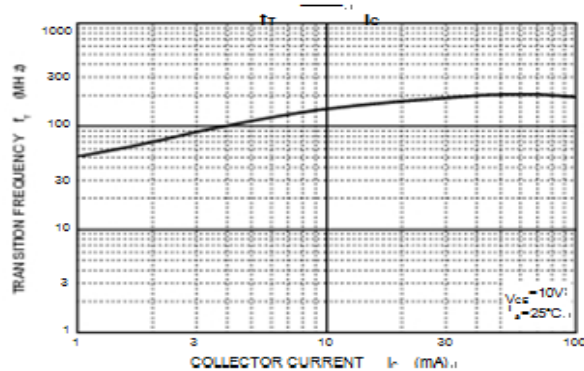
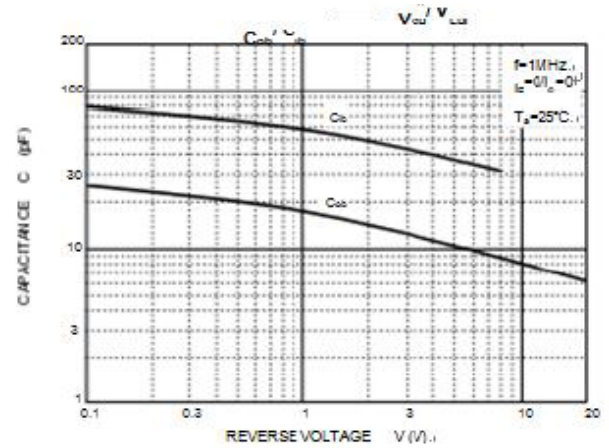
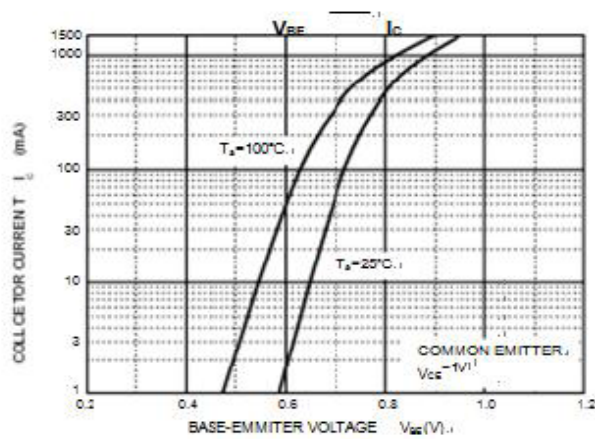
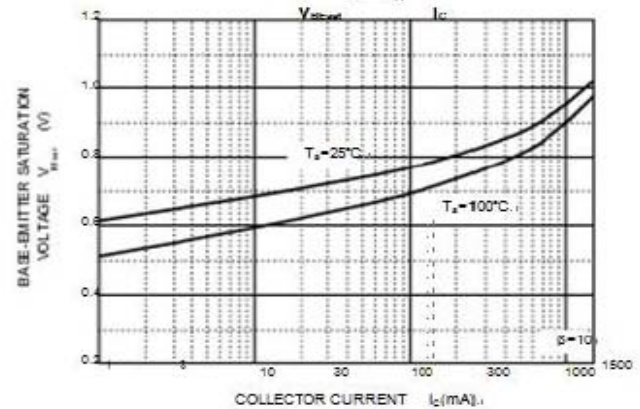
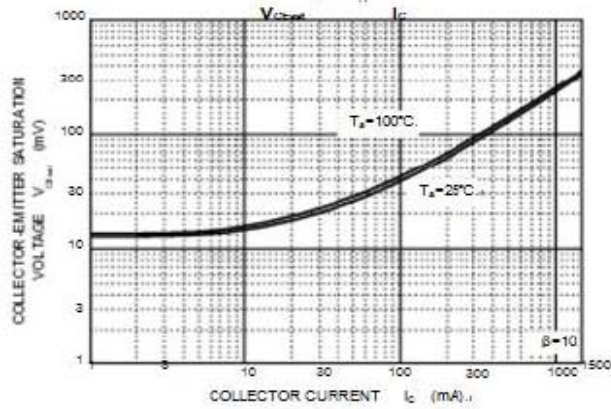
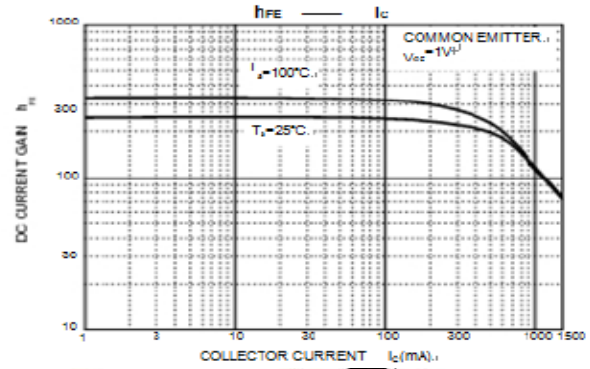
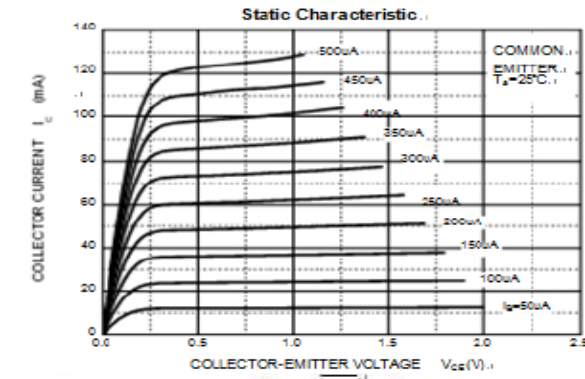
Electrical Characteristics ($T_A = 25^\circ C$ unless otherwise specified):

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | 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 | $V_{(BR)EBO}$ | $I_E = 100\mu A, I_C = 0$ | 5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = 40V, I_E = 0$ | | | 0.1 | μA |
| Collector cut-off current | I_{CEO} | $V_{CB} = 20V, I_E = 0$ | | | 0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = 5V, I_C = 0$ | | | 0.1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = 1V, I_C = 100mA$ | 120 | | 400 | |
| | $h_{FE(2)}$ | $V_{CE} = 1V, I_C = 800mA$ | 40 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 800mA, I_B = 80mA$ | | | 0.5 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = 800mA, I_B = 80mA$ | | | 1.2 | V |
| Transition frequency | f_T | $V_{CE} = 10V, I_C = 50mA$ $F = 30MHz$ | 100 | | | MHZ |

Classification of $h_{FE(1)}$

| Rank | L | H | J |
|-------|---------|---------|---------|
| Range | 120~200 | 200~350 | 300~400 |

Ratings and Characteristic Curves $T_A=25^{\circ}\text{C}$ unless otherwise noted



SOT-23 MECHANICAL DATA

