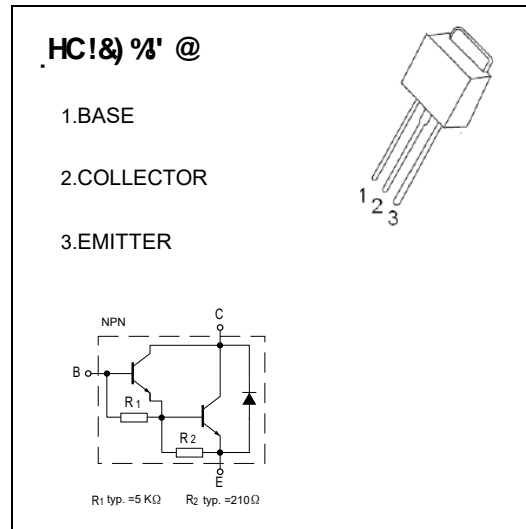


TO-251-3L Plastic-Encapsulate Transistors

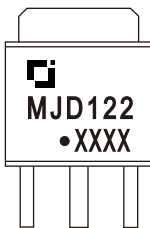
A>8 %&& TRANSISTOR (NPN)

: 95HI F9G'

- High DC Current Gain
- Electrically Similar to Popular TIP122
- Built-in a Damper Diode at E-C



MARKING



MJD122=Device code
 Solid dot=Green moldinn compound device,
 if none,the normal device
 XXXX=Code

A5L=AI A'F5HB; G (Ta=25°C unless otherwise noted)

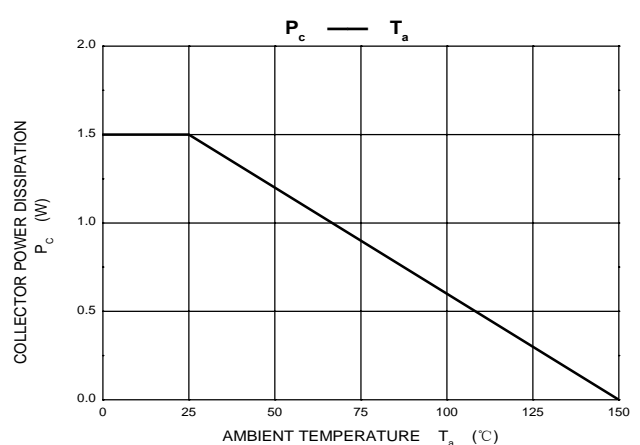
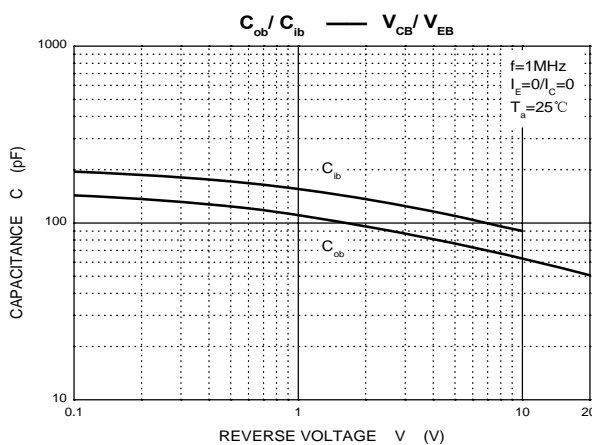
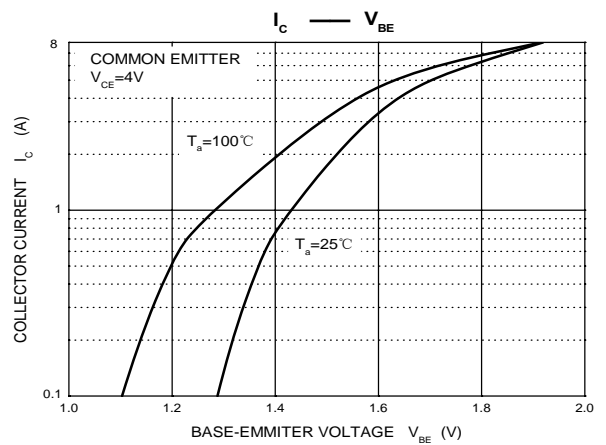
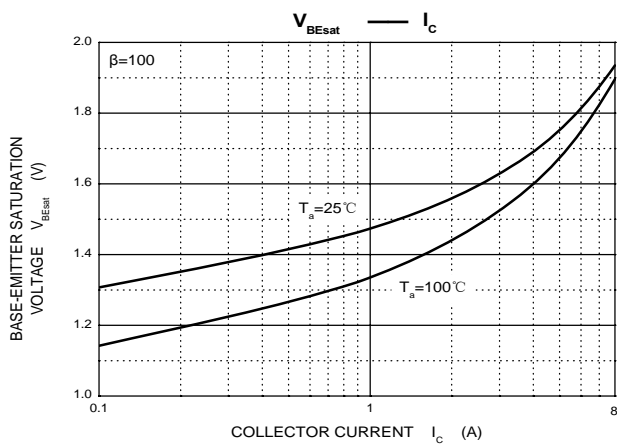
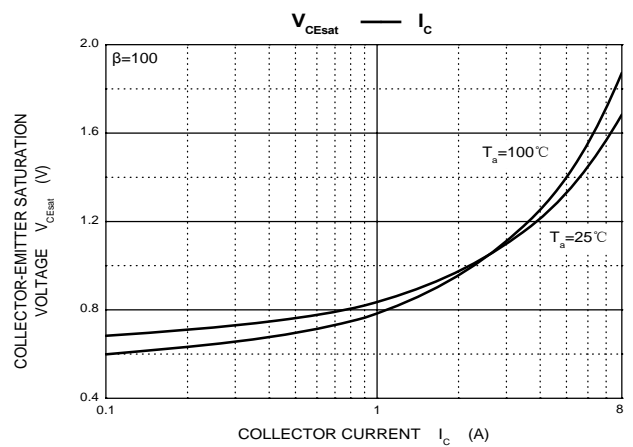
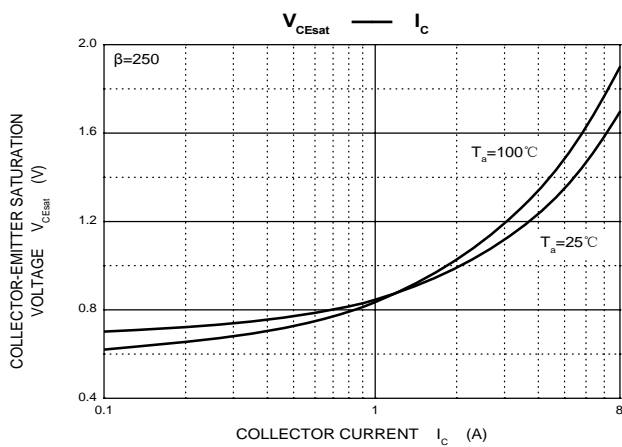
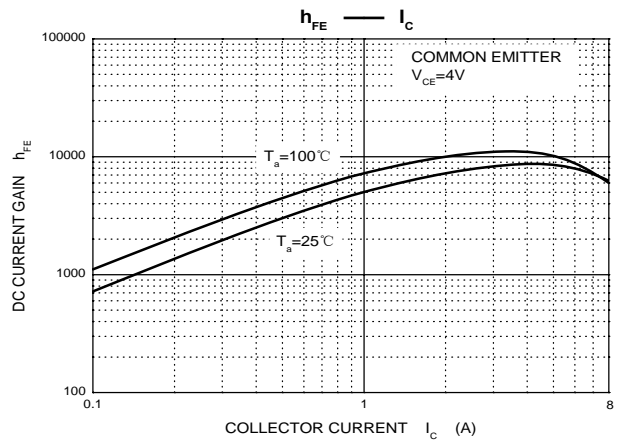
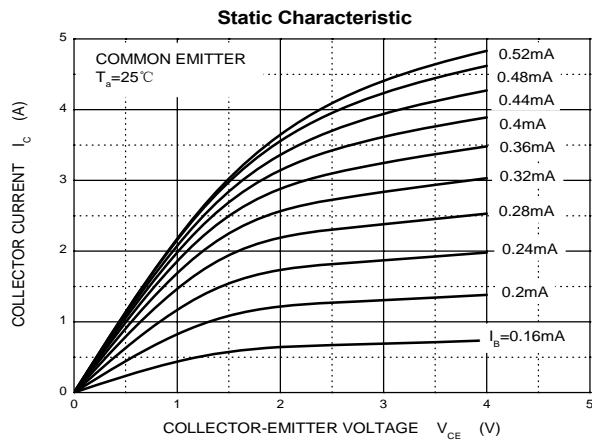
| Parameter | Symbol | Value | Unit |
|--|------------|---------|------|
| Collector-Base Voltage | V_{CB} | 100 | V |
| Collector-Emitter Voltage | V_{CE} | 100 | V |
| Emitter-Base Voltage | V_{EB} | 5 | V |
| Collector Current -Continuous | I_C | 8 | A |
| Collector Dissipation | P_D | 1.5 | W |
| Operation Junction and Storage Temperature Range | T_{jstg} | -55-150 | °C |

9 7 HF 5 @ 7 < 5 F 5 7 H 9 F GH 7 G (H1 &) °C i b`Ygg`cH Yfk jgY`gdYVWZYX`

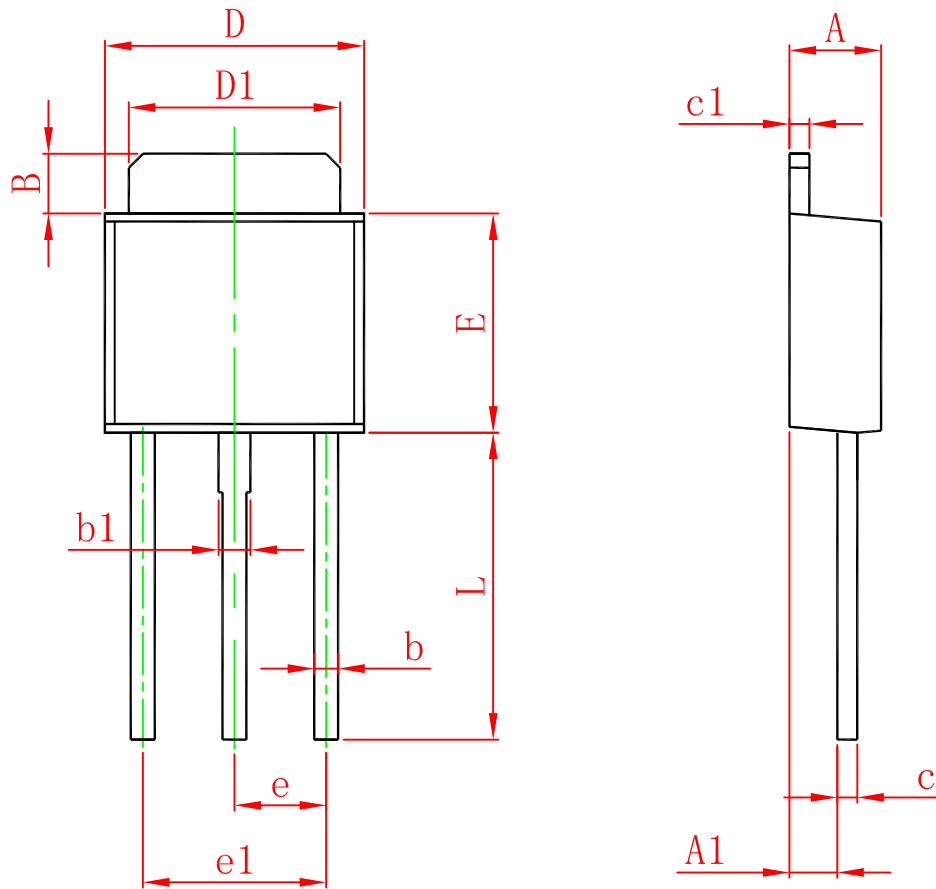
| DUUa YHY` | Gna Vc` | HYgh`VcbX]hcbg` | A]b | Hnd`..... | A U`..... | I b]h |
|---------------------------------------|----------------|-------------------------------|------|-----------|-----------|---------|
| 7c`YWcf!VUgYVfYU_Xck b`j c`HU] Y` | $V_{(BR)CBO}$ | $I_C=1mA, I_E=0$ | 100 | | | V |
| 7c`YWcf!Ya]HYf`VfYU_Xck b`j c`HU] Y` | $V_{(BR)CEO}$ | $I_C=30mA, I_B=0$ | 100 | | | V |
| 9a]HYf!VUgYVfYU_Xck b`j c`HU] Y` | $V_{(BR)EBO}$ | $I_E=3mA, I_C=0$ | 5 | | | V |
| 7c`YWcf`W HcZWW ffYbhi` | I_{CBO} | $V_{CB}=100V, I_E=0$ | | | 10 | μA |
| 7c`YWcf!Ya]HYf`W HcZWW ffYbhi` | I_{CEO} | $V_{CE}=50V, I_E=0$ | | | 10 | μA |
| 9a]HYf`W HcZWW ffYbhi` | I_{EBO} | $V_{EB}=5V, I_C=0$ | | | 2 | mA |
| 8 7`W ffYbhi[U]b` | $h_{FE(2)}$ | $V_{CE}=4V, I_C=4A$ | 1000 | | 12000 | |
| | $h_{FE(3)}$ | $V_{CE}=4V, I_C=8A$ | 100 | | | |
| 7c`YWcf!Ya]HYf`gUhi fU]cb`j c`HU] Y` | $V_{CE(sat)1}$ | $I_C=4A, I_B=16mA$ | | | 2 | V |
| | $V_{CE(sat)2}$ | $I_C=8A, I_B=80mA$ | | | 4 | V |
| 6 UgY!Ya]HYf`gUhi fU]cb`j c`HU] Y` | $V_{BE(sat)}$ | $I_C=8A, I_B=80mA$ | | | 4.5 | V |
| 6 UgY!Ya]HYf`j c`HU] Y`* | V_{BE} | $V_{CE}=4V, I_C=4A$ | | | 2.8 | V |
| 7c`YWcf`ci hdi hVUdUV]UbW` | C_{ob} | $V_{CB}=10V, I_E=0, f=0.1MHz$ | | | 200 | pF |

Typical Characteristics

MJD122



TO-251-3L Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 2.200 | 2.400 | 0.087 | 0.094 |
| A1 | 1.050 | 1.350 | 0.042 | 0.054 |
| B | 1.350 | 1.650 | 0.053 | 0.065 |
| b | 0.500 | 0.700 | 0.020 | 0.028 |
| b1 | 0.700 | 0.900 | 0.028 | 0.035 |
| c | 0.430 | 0.580 | 0.017 | 0.023 |
| c1 | 0.430 | 0.580 | 0.017 | 0.023 |
| D | 6.350 | 6.650 | 0.250 | 0.262 |
| D1 | 5.200 | 5.400 | 0.205 | 0.213 |
| E | 5.400 | 5.700 | 0.213 | 0.224 |
| e | 2.300 TYP. | | 0.091 TYP. | |
| e1 | 4.500 | 4.700 | 0.177 | 0.185 |
| L | 7.500 | 7.900 | 0.295 | 0.311 |