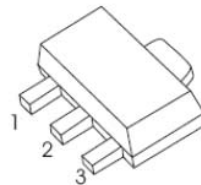


TRANSISTOR (NPN)

FEATURES

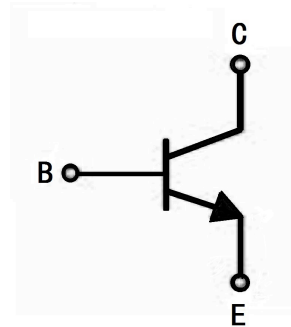
- Low forward voltage
- Fast reverse recovery time

SOT-89-3L



1. BASE
2. COLLECTOR
3. EMITTER

CIRCUIT DIAGRAM



MARKING: D882

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|-------------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | 40 | V |
| Collector-Emitter Voltage | V_{CEO} | 30 | V |
| Emitter-Base Voltage | V_{EBO} | 6 | V |
| Collector Current -Continuous | I_{CM} | 3 | A |
| Collector Dissipation | P_D | 0.5 | W |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature | T_{stg} | -55~150 | °C |

ELECTRICAL CHARACTERISTICS Ta=25 °C unless otherwise specified

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|--------------------------------------|---------------|------------------------------------|-----|-----|---------|
| Emitter-base breakdown voltage | BV_{EBO} | $I_E=100\mu A, I_C=0$ | 6 | | V |
| Collector-base breakdown voltage | BV_{CBO} | $I_C=100\mu A, I_E=0$ | 40 | | V |
| Collector-emitter breakdown voltage | BV_{CEO} | $I_C=1mA, I_B=0$ | 30 | | V |
| Emitter cut-off current | I_{EBO} | $V_{EB}=6V, I_C=0$ | | 1 | μA |
| Collector cut-off current | I_{CBO} | $V_{CB}=40V, I_E=0$ | | 1 | μA |
| Collector cut-off current | I_{CEO} | $V_{CE}=30V, I_B=0$ | | 10 | μA |
| Collector-emitter saturation voltage | $V_{CE(SAT)}$ | $I_C=2A, I_B=0.2A$ | | 0.5 | V |
| Base-emitter saturation voltage | $V_{BE(SAT)}$ | $I_C=2A, I_B=0.2A$ | | 1.5 | V |
| DC current gain | h_{fe} | $V_{CE}=2V, I_C=1A$ | 160 | 320 | |
| Transition frequency | f_T | $V_{CE}=6V, I_C=20mA$ $F=30MHZ$ | 150 | | MHZ |

TYPICAL CHARACTERISTICS

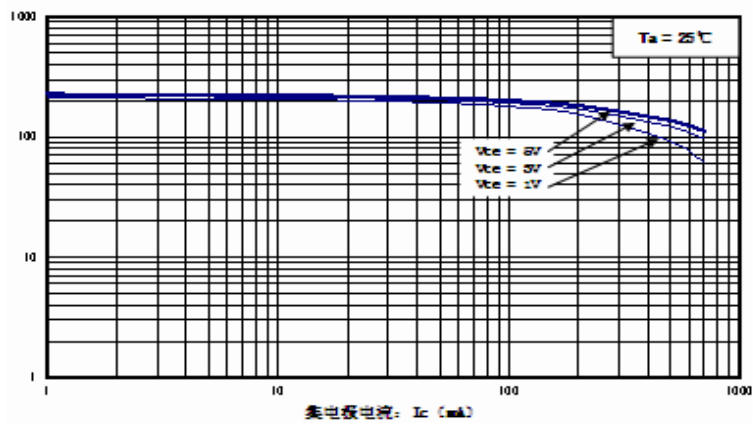
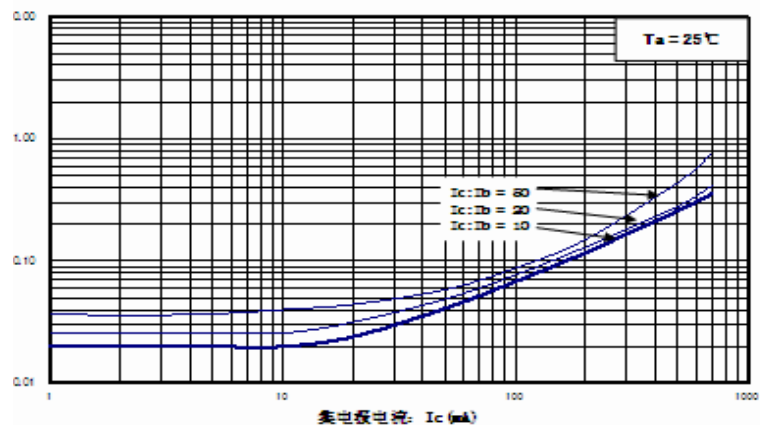
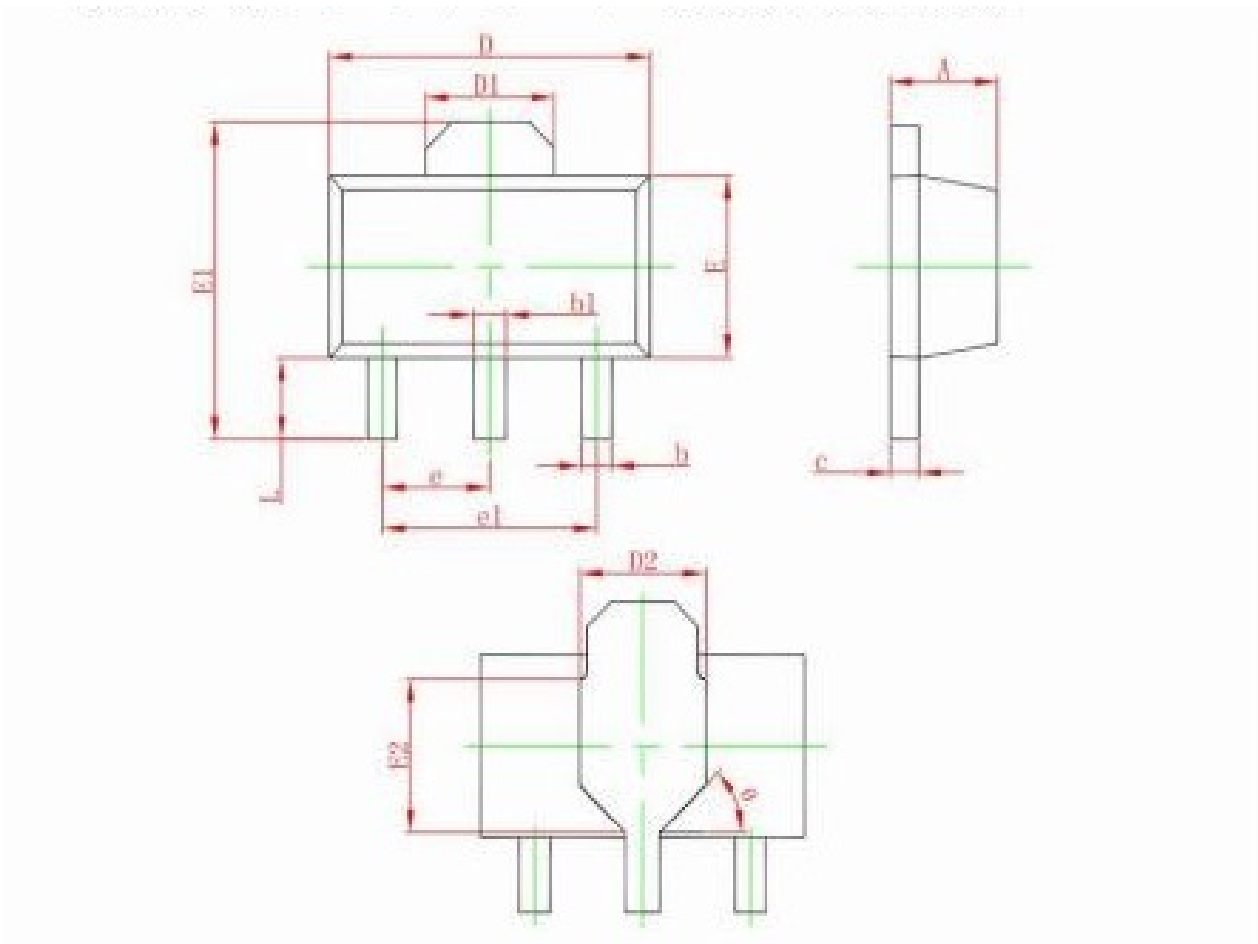


Fig.1 直流电流增益 Vs. 集电极电流.



SOT-89-3L Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 1.400 | 1.600 | 0.055 | 0.063 |
| b | 0.320 | 0.520 | 0.013 | 0.020 |
| b1 | 0.400 | 0.580 | 0.016 | 0.023 |
| c | 0.350 | 0.440 | 0.014 | 0.017 |
| D | 4.400 | 4.600 | 0.173 | 0.181 |
| D1 | 1.550 REF. | | 0.061 REF. | |
| D2 | 1.750 REF. | | 0.069 REF. | |
| E | 2.300 | 2.600 | 0.091 | 0.102 |
| E1 | 3.940 | 4.250 | 0.155 | 0.167 |
| E2 | 1.900 REF. | | 0.075 REF. | |
| e | 1.500 TYP. | | 0.060 TYP. | |
| e1 | 3.000 TYP. | | 0.118 TYP. | |
| L | 0.900 | 1.200 | 0.035 | 0.047 |
| θ | 45° | | 45° | |