

## D882 TRANSISTOR (NPN)

## SOT-89-3L

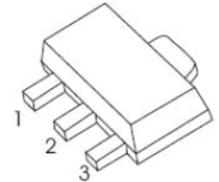
### FEATURES

Power dissipation

1. BASE

2. COLLECTOR

3. EMITTER



### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

| Symbol           | Parameter                                   | Value   | Unit |
|------------------|---|---------|------|
| V <sub>CB0</sub> | Collector-Base Voltage                      | 40      | V    |
| V <sub>CE0</sub> | Collector-Emitter Voltage                   | 30      | V    |
| V <sub>EBO</sub> | Emitter-Base Voltage                        | 6       | V    |
| I <sub>C</sub>   | Collector Current -Continuous               | 3       | A    |
| P <sub>C</sub>   | Collector Power Dissipation                 | 0.5     | W    |
| R <sub>θJA</sub> | Thermal Resistance from Junction to Ambient | 25      | °C/W |
| T <sub>J</sub>   | Junction Temperature                        | 150     | °C   |
| T <sub>stg</sub> | Storage Temperature                         | -55~150 | °C   |

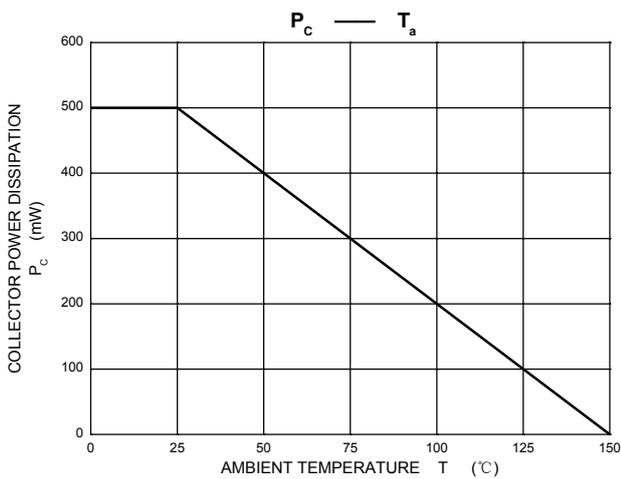
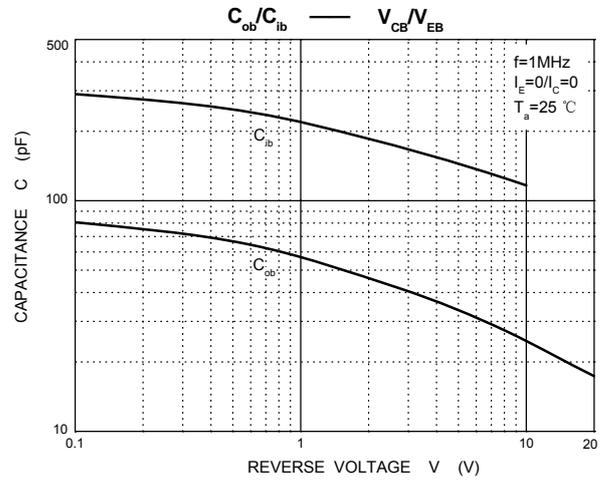
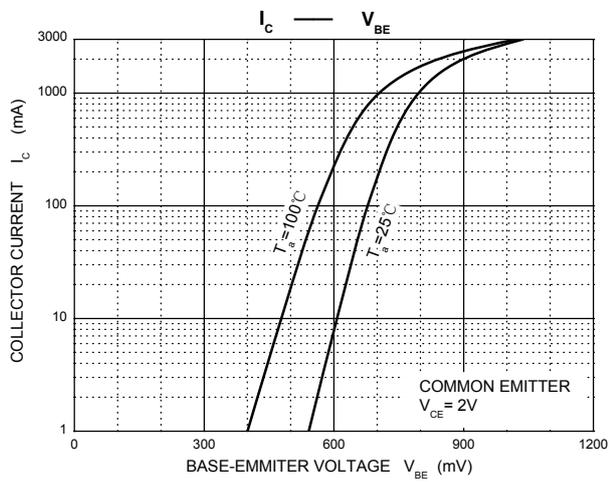
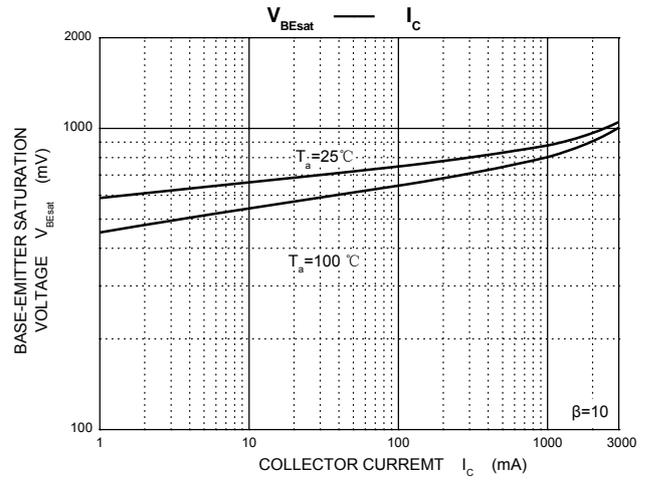
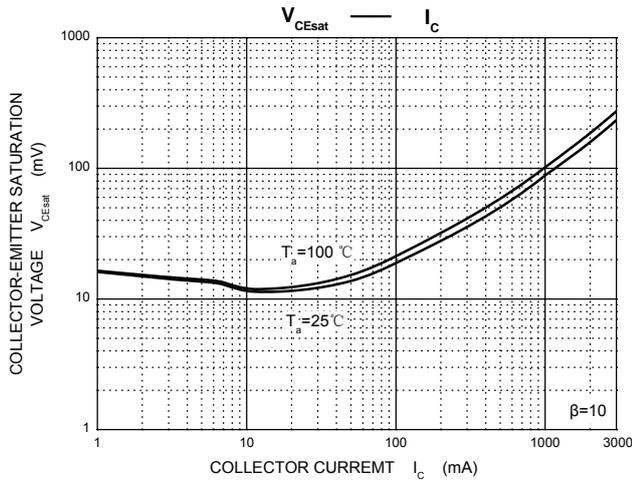
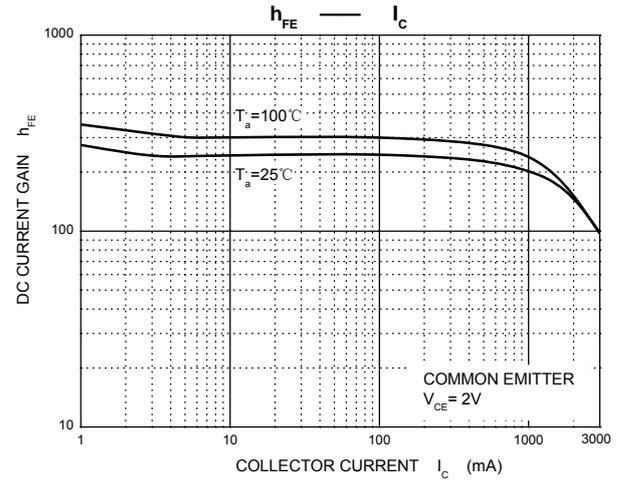
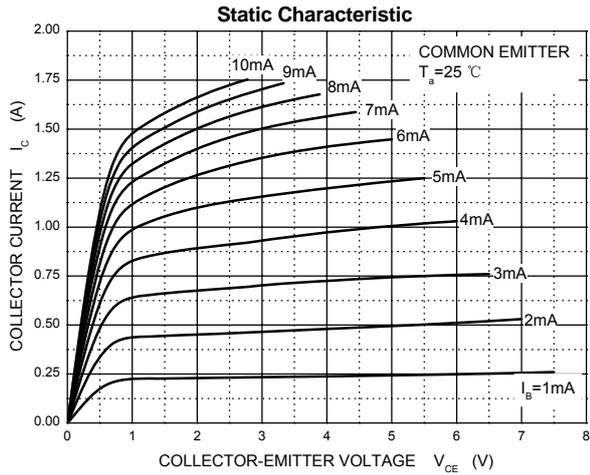
### ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25°C unless otherwise specified)

| Parameter                            | Symbol               | Test conditions  | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|--|-----|-----|-----|------|
| Collector-base breakdown voltage     | V <sub>(BR)CBO</sub> | I <sub>C</sub> = 100μA, I <sub>E</sub> =0              | 40  |     |     | V    |
| Collector-emitter breakdown voltage  | V <sub>(BR)CEO</sub> | I <sub>C</sub> = 10mA, I <sub>B</sub> =0               | 30  |     |     | V    |
| Emitter-base breakdown voltage       | V <sub>(BR)EBO</sub> | I <sub>E</sub> = 100μA, I <sub>C</sub> =0              | 6   |     |     | V    |
| Collector cut-off current            | I <sub>CBO</sub>     | V <sub>CB</sub> = 40V, I <sub>E</sub> =0               |     |     | 1   | μA   |
| Collector cut-off current            | I <sub>CEO</sub>     | V <sub>CE</sub> = 30V, I <sub>B</sub> =0               |     |     | 10  | μA   |
| Emitter cut-off current              | I <sub>EBO</sub>     | V <sub>EB</sub> = 6V, I <sub>C</sub> =0                |     |     | 1   | μA   |
| DC current gain                      | h <sub>FE(1)</sub>   | V <sub>CE</sub> =2V, I <sub>C</sub> = 1A               | 60  |     | 400 |      |
|                                      | h <sub>FE(2)</sub>   | V <sub>CE</sub> =2V, I <sub>C</sub> = 100mA            | 32  |     |     |      |
| Collector-emitter saturation voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> = 2A, I <sub>B</sub> = 0.2 A            |     |     | 0.5 | V    |
| Base-emitter saturation voltage      | V <sub>BE(sat)</sub> | I <sub>C</sub> = 2A, I <sub>B</sub> = 0.2 A            |     |     | 1.5 | V    |
| Transition frequency                 | f <sub>T</sub>       | V <sub>CE</sub> = 5V, I <sub>C</sub> =0.1A<br>f =10MHz | 50  |     |     | MHz  |

### CLASSIFICATION OF h<sub>FE(1)</sub>

| Rank  | R      | O       | Y       | GR      |
|-------|--------|---------|---------|---------|
| Range | 60-120 | 100-200 | 160-320 | 200-400 |

# Typical Characteristics



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bipolar Transistors - BJT category](#):*

*Click to view products by [Yongyutai Electronics manufacturer](#):*

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NJVMJD148T4G](#) [NTE123AP-10](#) [NTE153MCP](#) [NTE16](#)  
[NTE195A](#) [NTE92](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC2712S-GR,LF](#) [SP000011176](#) [2N2907A](#) [2N3904-](#)  
[NS](#) [2N5769](#) [2SC2412KT146S](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [MJE340](#) [Jantx2N5416](#) [US6T6TR](#) [NJL0281DG](#) [732314D](#) [CPH3121-TL-E](#)  
[CPH6021-TL-H](#) [873787E](#) [IMZ2AT108](#) [MMST8098T146](#) [UMX21NTR](#) [MCH6102-TL-E](#) [NJL0302DG](#) [30A02MH-TL-E](#) [NTE13](#) [NTE26](#)  
[NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [STX83003-AP](#) [JANTX2N2920L](#) [JANSR2N2222AUB](#) [CMLT3946EG TR](#) [2SA1371D-AE](#)