

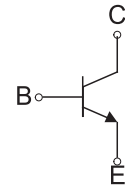
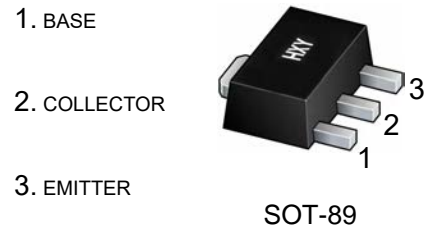


Features

- High voltage: $V_{CEO}=160V$
- Large continuous collector current capability

Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|--------|---------|----------|
| 2SC2383 | SOT-89 | 2383Y | 1000 |



Maxmim Ratings (Ta=25 unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|----------------|--|----------|------|
| V_{CBO} | Collector-Base Voltage | 160 | V |
| V_{CEO} | Collector-Emitter Voltage | 160 | V |
| V_{EBO} | Emitter-Base Voltage | 6 | V |
| I_C | Collector Current -Continuous | 1 | A |
| P_C | Collector Power Dissipation | 0.5 | W |
| T_J, T_{stg} | Operation Junction and Storage Temperature Range | -55~+150 | °C |

Electrcal Characteristics (Ta=25 unless otherwise specified)

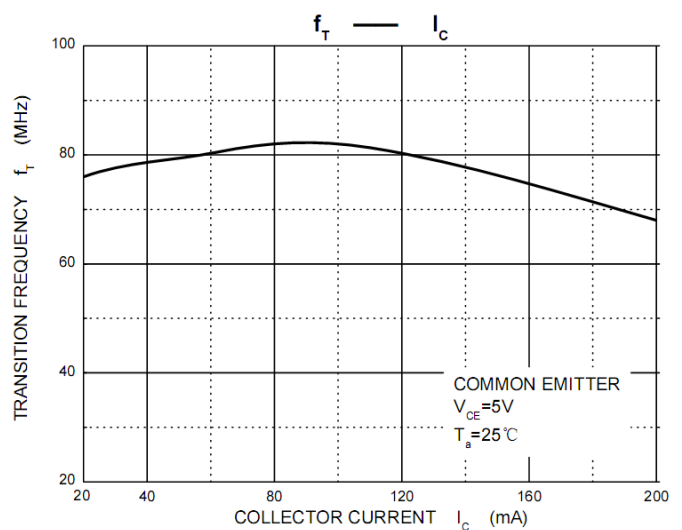
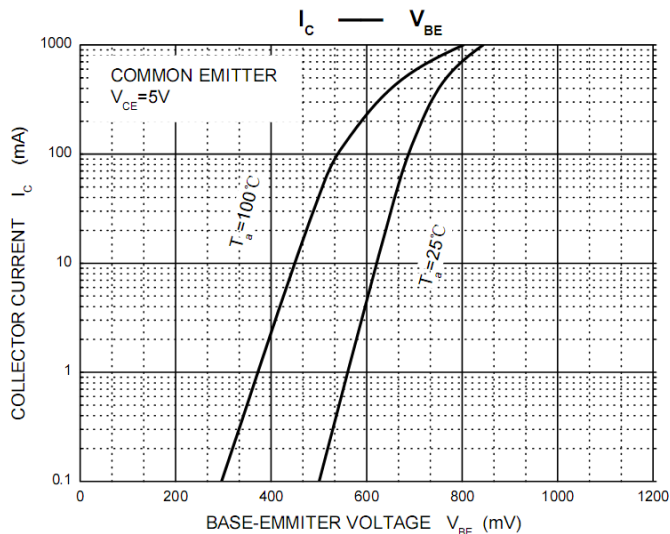
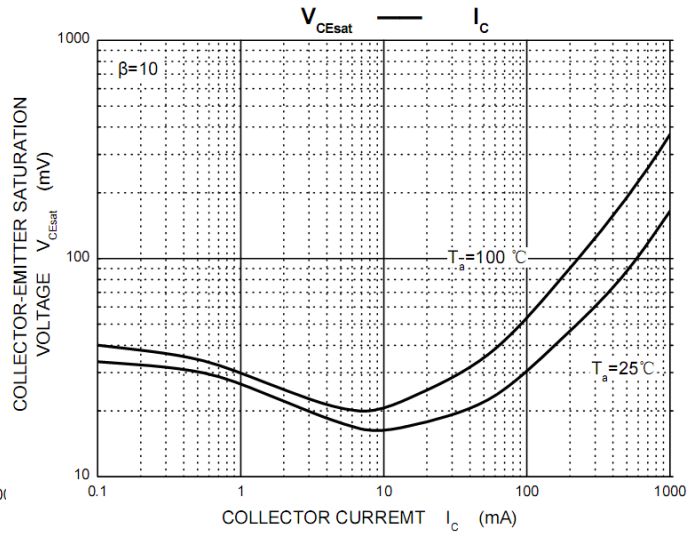
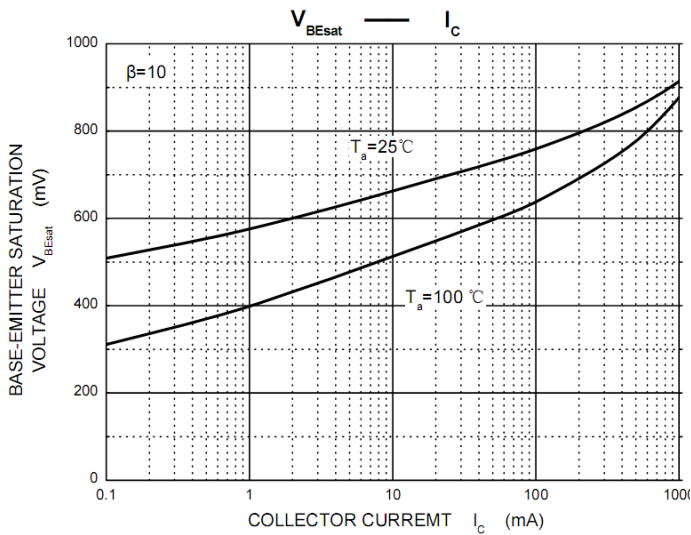
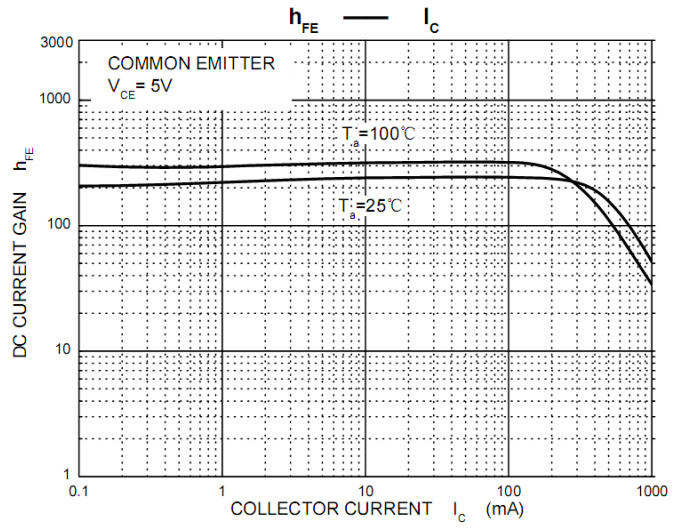
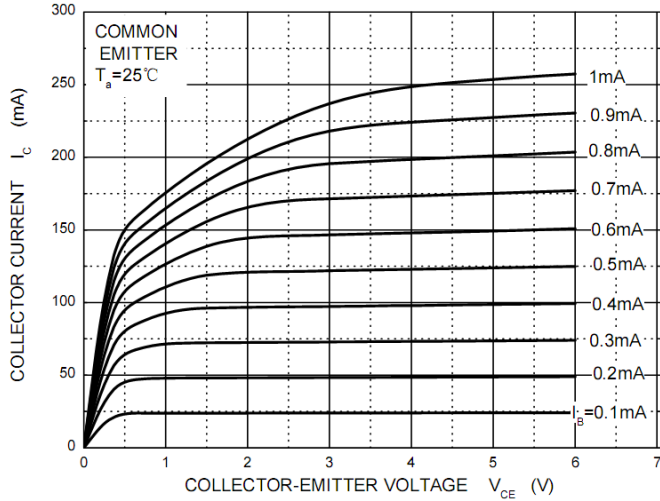
| Parameter | Symbol | Test conditions | Min | Max | Unit |
|--------------------------------------|-----------------|-----------------------------|------|------|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=100\mu A, I_E=0$ | 160 | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}^*$ | $I_C=10mA, I_B=0$ | 160 | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=10\mu A, I_C=0$ | 6 | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=150V, I_E=0$ | | 1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=6V, I_C=0$ | | 1 | μA |
| DC current gain | h_{FE} | $V_{CE}=5V, I_C=200mA$ | 100 | 320 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=500mA, I_B=50mA$ | | 1 | V |
| Base-emitter voltage | V_{BE} | $I_C=5mA, V_{CE}=5V$ | 0.45 | 0.75 | V |
| Transition frequency | f_T | $V_{CE}=5V, I_C=200mA$ | 20 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | | 20 | pF |

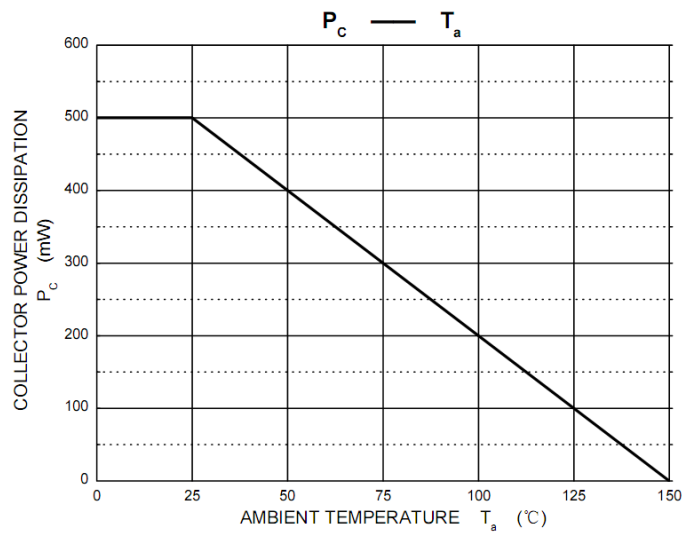
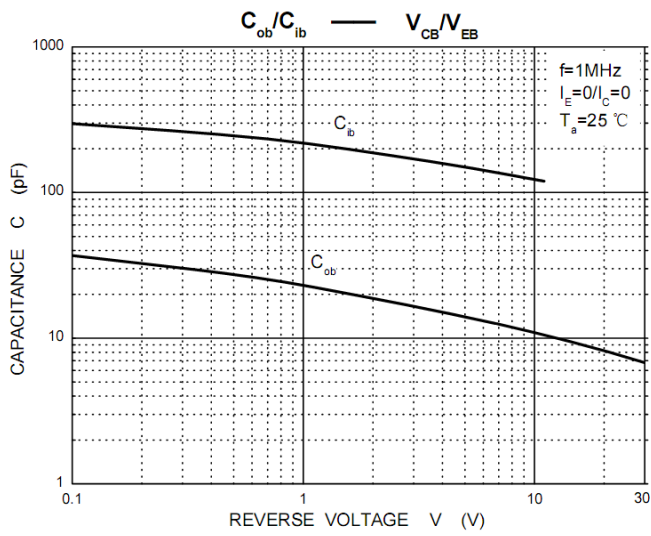
* pulse test



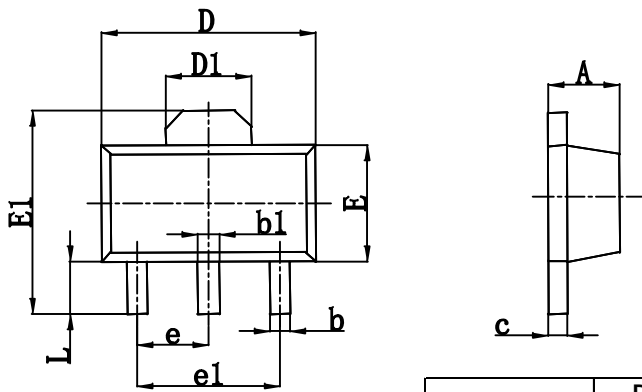
Typical Characteristics

Static Characteristic





SOT-89 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. | |
| E | 2.300 | 2.600 | 0.091 | 0.102 |
| E1 | 3.940 | 4.250 | 0.155 | 0.167 |
| e | 1.500 TYP. | | 0.060 TYP. | |
| e1 | 3.000 TYP. | | 0.118 TYP. | |
| L | 0.900 | 1.200 | 0.035 | 0.047 |



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