

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

## Product Specification

|              |             |                |
|--------------|-------------|----------------|
| ▶ Domestic   | Part Number | EV2SC3265-X-S1 |
| ▶ Overseas   | Part Number | 2SC3265        |
| ▶ Equivalent | Part Number | 2SC3265        |

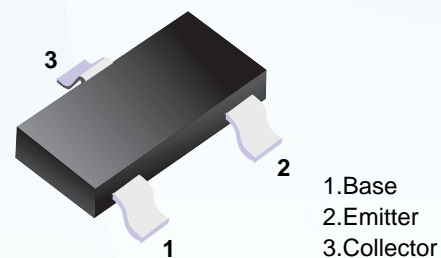
"S1" means SOT-23

EV is the abbreviation of name EVVO

## ■ NPN Transistors

### ■ Features

- High DC current gain
- Low saturation voltage
- Complementary to 2SA1298



■ Simplified outline(SOT-23)

### ■ Absolute Maximum Ratings Ta = 25°C

| Parameter                      | Symbol           | Rating     | Unit |
|--------------------------------|------------------|------------|------|
| Collector - Base Voltage       | V <sub>CB0</sub> | 30         | V    |
| Collector - Emitter Voltage    | V <sub>CEO</sub> | 25         |      |
| Emitter - Base Voltage         | V <sub>EB0</sub> | 5          |      |
| Collector Current - Continuous | I <sub>C</sub>   | 800        | mA   |
| Base Current                   | I <sub>B</sub>   | 160        |      |
| Collector Power Dissipation    | P <sub>C</sub>   | 200        | mW   |
| Junction Temperature           | T <sub>J</sub>   | 150        | °C   |
| Storage Temperature Range      | T <sub>stg</sub> | -55 to 150 |      |

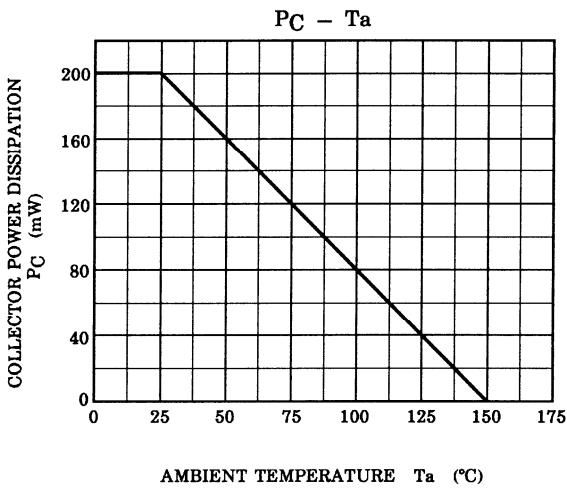
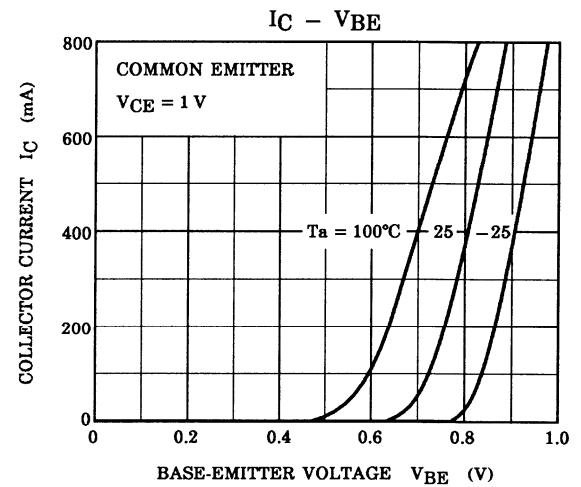
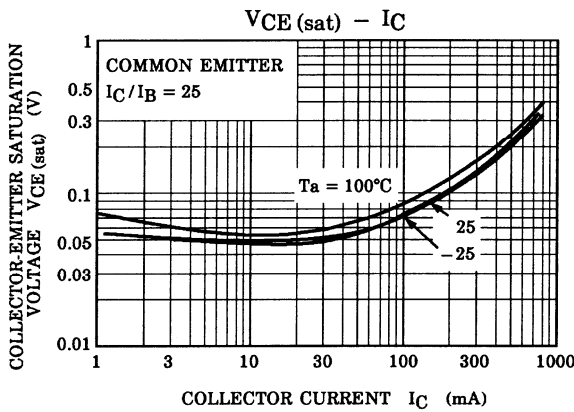
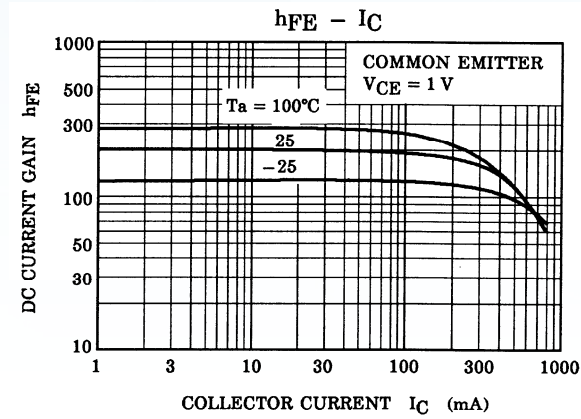
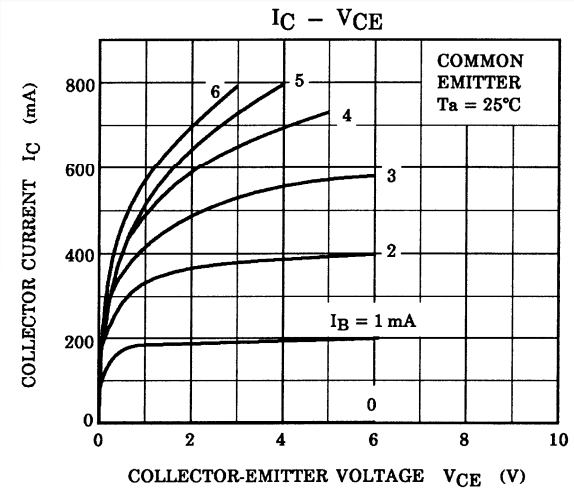
### ■ Electrical Characteristics Ta = 25°C

| Parameter                            | Symbol               | Test Conditions                                  | Min | Typ  | Max | Unit |
|--------------------------------------|----------------------|--|-----|------|-----|------|
| Collector-base breakdown voltage     | V <sub>CB0</sub>     | I <sub>C</sub> = 100 μA, I <sub>E</sub> = 0      | 30  |      |     | V    |
| Collector- emitter breakdown voltage | V <sub>CEO</sub>     | I <sub>C</sub> = 10 mA, I <sub>B</sub> = 0       | 25  |      |     |      |
| Emitter - base breakdown voltage     | V <sub>EB0</sub>     | I <sub>E</sub> = 100 μA, I <sub>C</sub> = 0      | 5   |      |     |      |
| Collector-base cut-off current       | I <sub>CB0</sub>     | V <sub>CB</sub> = 30 V, I <sub>E</sub> = 0       |     |      | 0.1 | μA   |
| Emitter cut-off current              | I <sub>EB0</sub>     | V <sub>EB</sub> = 5V, I <sub>C</sub> =0          |     |      | 0.1 |      |
| Collector-emitter saturation voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> = 500 mA, I <sub>B</sub> =20 mA   |     |      | 0.4 | V    |
| Base - emitter saturation voltage    | V <sub>BE(sat)</sub> | I <sub>C</sub> = 500 mA, I <sub>B</sub> =20 mA   |     | 0.72 | 1   |      |
| Base - emitter voltage               | V <sub>BE</sub>      | V <sub>CE</sub> = 1V, I <sub>C</sub> = 10mA      | 0.5 |      | 0.8 |      |
| DC current gain                      | h <sub>FE</sub>      | V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA     | 100 |      | 320 |      |
|                                      |                      | V <sub>CE</sub> = 1V, I <sub>C</sub> = 800mA     | 40  |      |     |      |
| Collector output capacitance         | C <sub>ob</sub>      | V <sub>CB</sub> = 10V, I <sub>E</sub> =0, f=1MHz |     | 13   |     | pF   |
| Transition frequency                 | f <sub>T</sub>       | V <sub>CE</sub> = 5V, I <sub>C</sub> = 10mA      |     | 120  |     | MHz  |

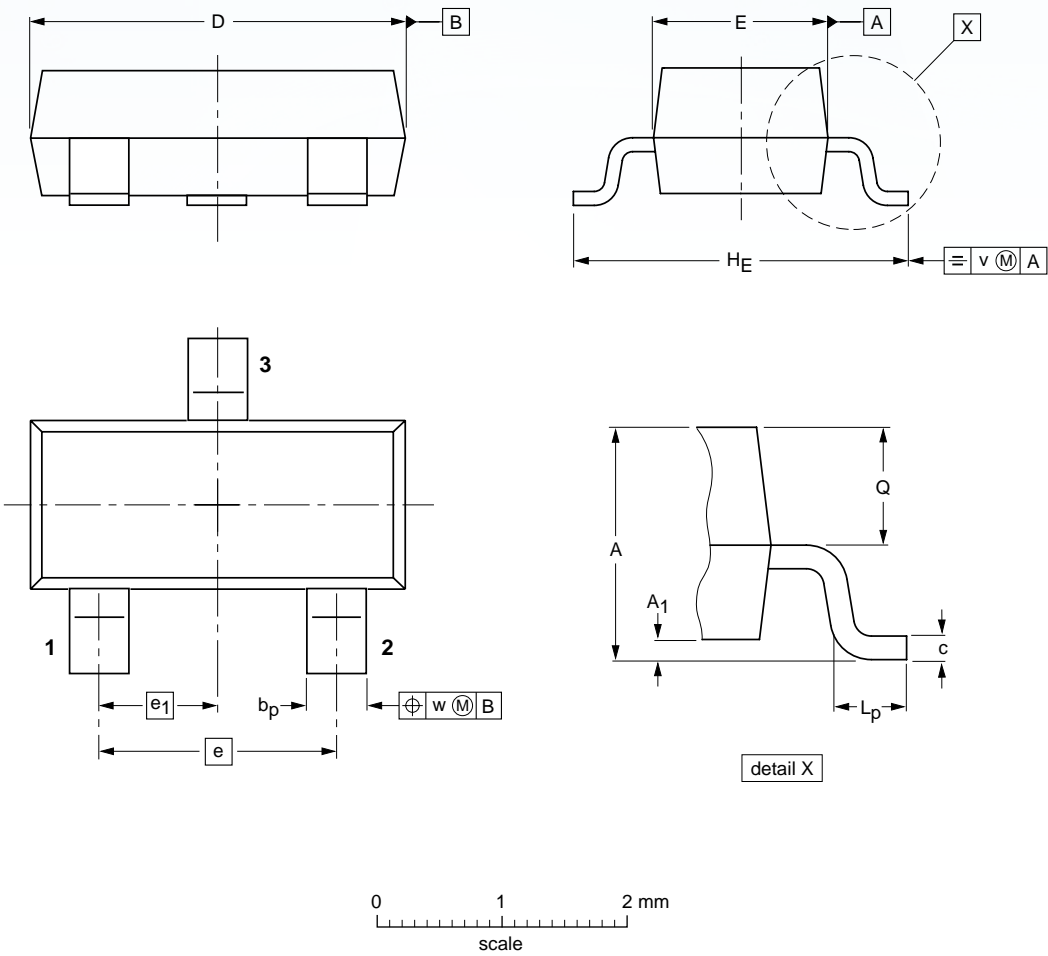
### ■ Classification of h<sub>FE</sub>(1)

| Type    | 2SC3265-O | 2SC3265-Y |
|---------|-----------|-----------|
| Range   | 100-200   | 160-320   |
| Marking | EO        | EY        |

■ Typical Characteristics



■ SOT-23



DIMENSIONS (mm are the original dimensions)

| UNIT | A          | A <sub>1</sub><br>max. | b <sub>p</sub> | c            | D          | E          | e   | e <sub>1</sub> | H <sub>E</sub> | L <sub>p</sub> | Q            | v   | w   |
|------|------------|------------------------|----------------|--------------|------------|------------|-----|----------------|----------------|----------------|--------------|-----|-----|
| mm   | 1.1<br>0.9 | 0.1                    | 0.48<br>0.38   | 0.15<br>0.09 | 3.0<br>2.8 | 1.4<br>1.2 | 1.9 | 0.95           | 2.5<br>2.1     | 0.45<br>0.15   | 0.55<br>0.45 | 0.2 | 0.1 |

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