



**Silicon NPN Triple Diffused Mesa**

☆Super Beta Transistor

**Application Example :**  
General Purpose

●Outline Drawing 1 .....MT-25(TO220)

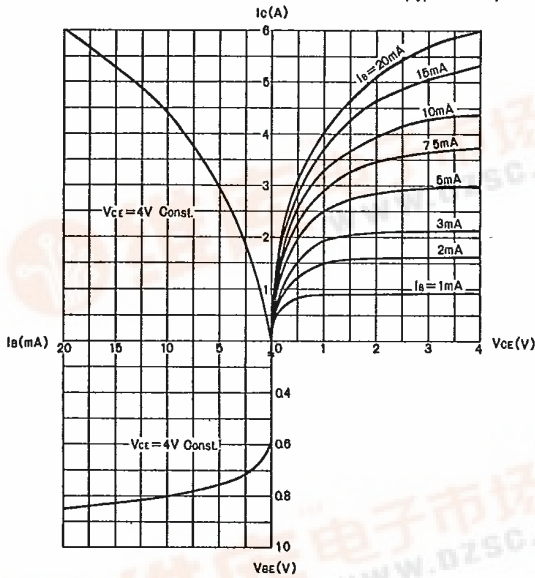
**Absolute Maximum Ratings**

| Symbol           | 2SC2315                    | 2SC2316 | Unit |
|------------------|----------------------------|---------|------|
| V <sub>CB0</sub> | 80                         | 100     | V    |
| V <sub>CEO</sub> | 60                         | 80      | V    |
| V <sub>EB0</sub> | 6                          |         | V    |
| I <sub>c</sub>   | 6                          |         | A    |
| I <sub>b</sub>   | 3                          |         | A    |
| P <sub>c</sub>   | 50 (T <sub>FL</sub> =25°C) |         | W    |
| T <sub>J</sub>   | 150                        |         | °C   |
| T <sub>stg</sub> | -55~+150                   |         | °C   |

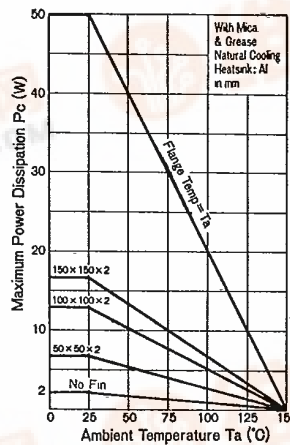
**Electrical Characteristics**

| Symbol               | Conditions                                  | 2SC2315 | 2SC2316 | Unit |
|----------------------|---|---------|---------|------|
| I <sub>CB0</sub>     | V <sub>CB</sub> =                           | 100max  | 100max  | μA   |
|                      |   | 80      | 100     | V    |
| I <sub>EB0</sub>     | V <sub>EB</sub> =6V                         | 1.0max  |         | mA   |
| V <sub>(BR)CEO</sub> | I <sub>c</sub> = 25mA                       | 60min   | 80min   | V    |
| h <sub>FE</sub>      | V <sub>CE</sub> =4V, I <sub>c</sub> =0.5A   | 500min  |         |      |
| V <sub>CE(sat)</sub> | I <sub>c</sub> = 3A, I <sub>B</sub> =0.06A  | 1.0max  |         | V    |
| f <sub>T</sub>       | V <sub>CE</sub> =12V, I <sub>E</sub> =-0.5A | 30typ   |         | MHz  |

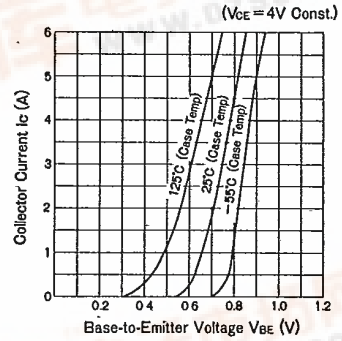
**Common Emitter Characteristics (Typical Value)**



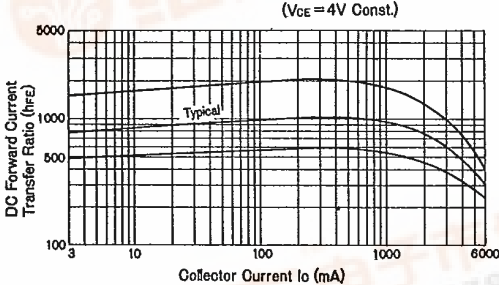
**Power Derating**



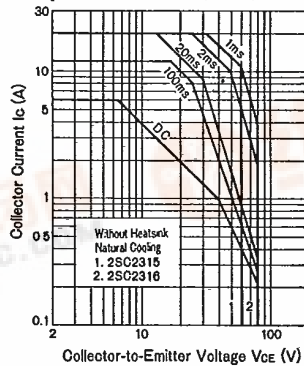
**Temperature Characteristics**



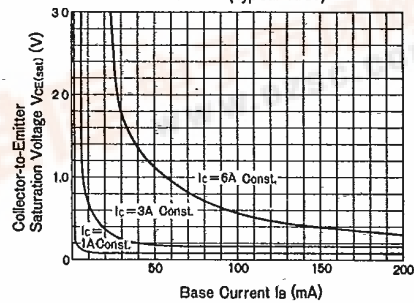
**DC Current Gain Characteristics**



**Maximum Areas For Safe Operation (ASO) (Single Pulse)**



**Collector-to-Emitter Saturation Characteristics (Typical Value)**



**DC Current Gain Temperature Characteristics**

