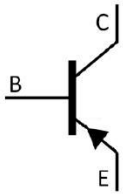
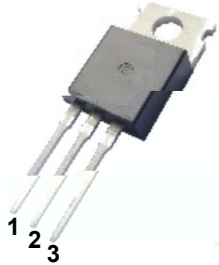


**/ Descriptions**

TO-220      PNP

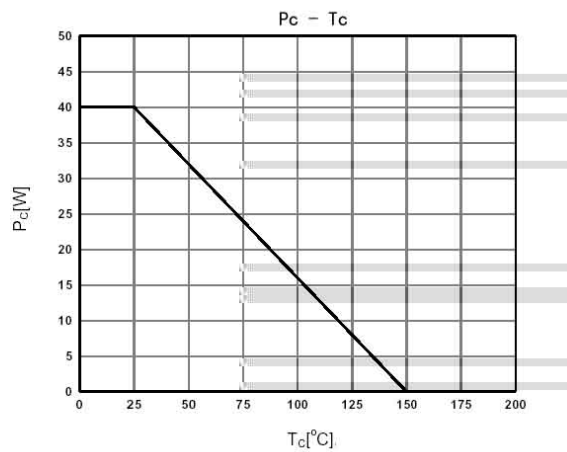
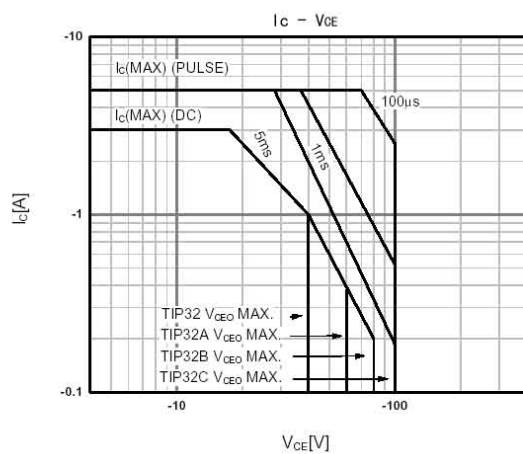
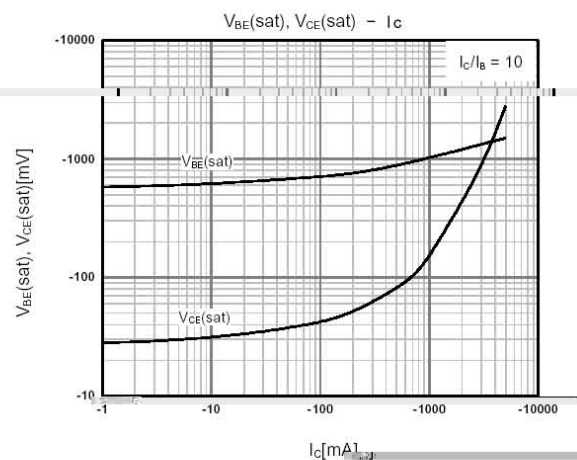
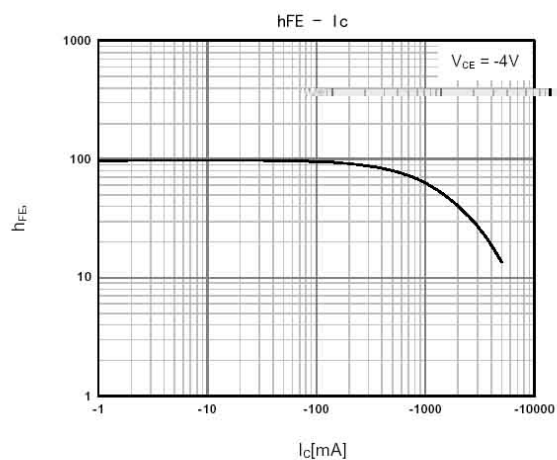
**/ Features**

TIP31

**/ Applications****/ Equivalent Circuit****/ Pinning****/  $h_{FE}$  Classifications & Marking**

|  | ℃ |   |  |  |  |   |
|--|---|---|--|--|--|---|
|  |   |   |  |  |  | ℃ |
|  |   | ~ |  |  |  | ℃ |

## / Electrical Characteristic Curve

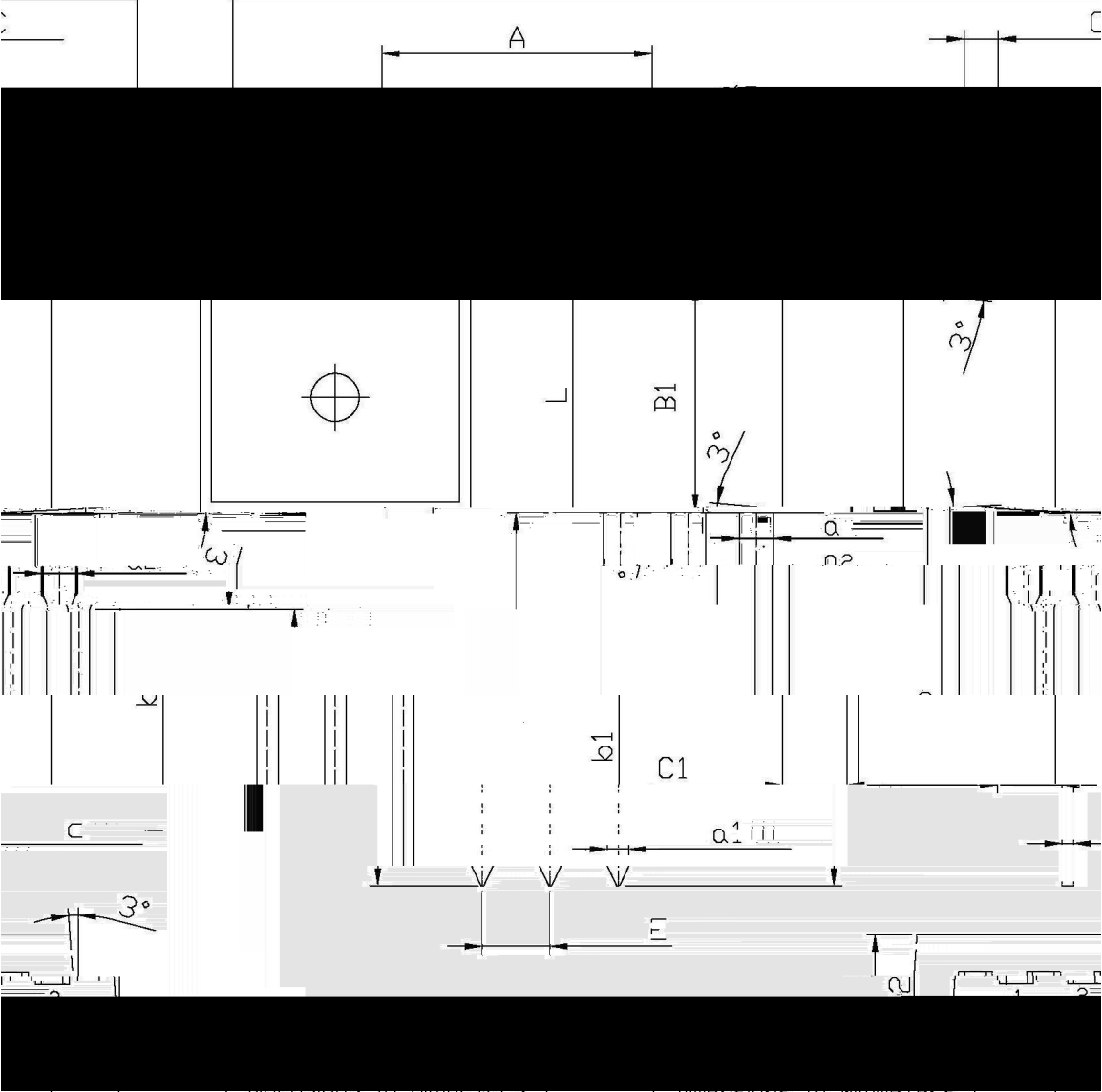


/ Package Dimensions

mm

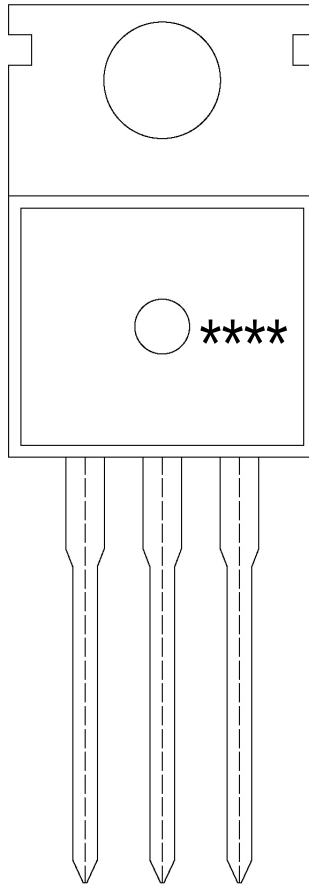
T0-220

单位:



| Symbol | Dimensions in Millimeters |      | Symbol | Dimensions in Millimeters |      |
|--------|---------------------------|------|--------|---------------------------|------|
|        | Min                       | Max  |        | Min                       | Max  |
| A      | 9.8                       | 10.2 | C      | 1.2                       | 1.4  |
| B      | 3.56                      | 3.64 | D      | 0.25                      | 0.27 |
| B1     | 9.0                       | 9.4  | E      | 1.1                       | 1.5  |
| C1     | 2.2                       | 2.6  | F      | 1.0                       | 1.2  |
| a1     | 0.7                       | 0.9  | G      | 1.0                       | 1.2  |
| a2     | 0.4                       | 0.6  | H      | 1.0                       | 1.2  |
| C2     | 4.3                       | 4.7  | I      | 1.0                       | 1.2  |
| E      | 1.45                      | 1.55 | J      | 1.0                       | 1.2  |

## / Marking Instructions



BR

TIP32

\*\*\*\*

Figure 1 consists of two plots. The left plot shows the time evolution of the probability distribution  $P(x)$  for different times  $t$ . The x-axis is labeled 'Position  $x$ ' and ranges from -10 to 10. The y-axis is labeled ' $P(x)$ ' and ranges from 0 to 0.001. The distributions are shown for  $t=0$  (blue),  $t=10$  (orange),  $t=20$  (green),  $t=30$  (red), and  $t=40$  (purple). The distributions are centered at  $x=0$  and their width increases with time. The right plot shows the time evolution of the average position  $\langle x \rangle$  (blue line) and its standard deviation  $\sigma$  (orange line) over time  $t$ . The x-axis is labeled 'Time  $t$ ' and ranges from 0 to 40. The y-axis is labeled ' $\langle x \rangle$  and  $\sigma$ ' and ranges from 0 to 10. Both  $\langle x \rangle$  and  $\sigma$  increase linearly with time.

 $\pm$ 

## °C

| 封装形式     | 包装数量             |                       |                        |                              |                        | 包装尺寸    |             |             |
|----------|------------------|-----------------------|------------------------|------------------------------|------------------------|---------|-------------|-------------|
|          | Units/Bag<br>只/袋 | Bags/Inner Box<br>袋/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Bag 袋   | Inner Box 盒 | Outer Box 箱 |
| TO-220/F | 200              | 10                    | 2,000                  | 5                            | 10,000                 | 135×190 | 237×172×102 | 560×245×195 |

| 封装形式     | 包装数量               |                         |                        |                              |                        | 包装尺寸         |             |             |
|----------|--------------------|-------------------------|------------------------|------------------------------|------------------------|--------------|-------------|-------------|
|          | Units/Tube<br>只/套管 | Tubes/Inner Box<br>套管/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Tube 套管      | Inner Box 盒 | Outer Box 箱 |
| TO-220/F | 50                 | 20                      | 1,000                  | 5                            | 5,000                  | 532×31.4×5.5 | 555×164×50  | 575×290×180 |

## 6 6