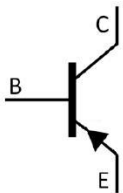


Silicon PNP transistor in a TO-92(R) Plastic Package.

High Voltage, Low Noise.

Low noise amplifier application.

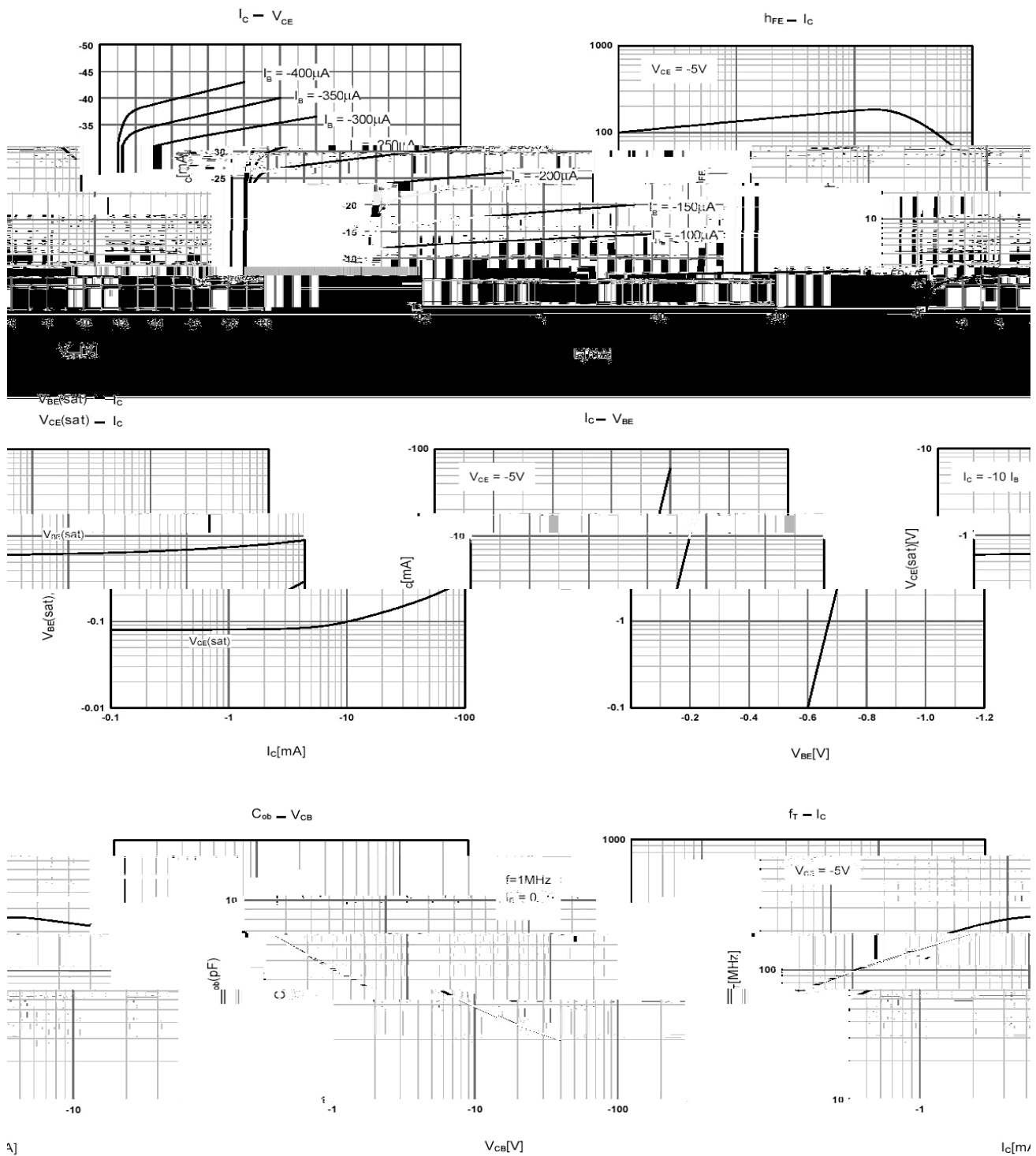


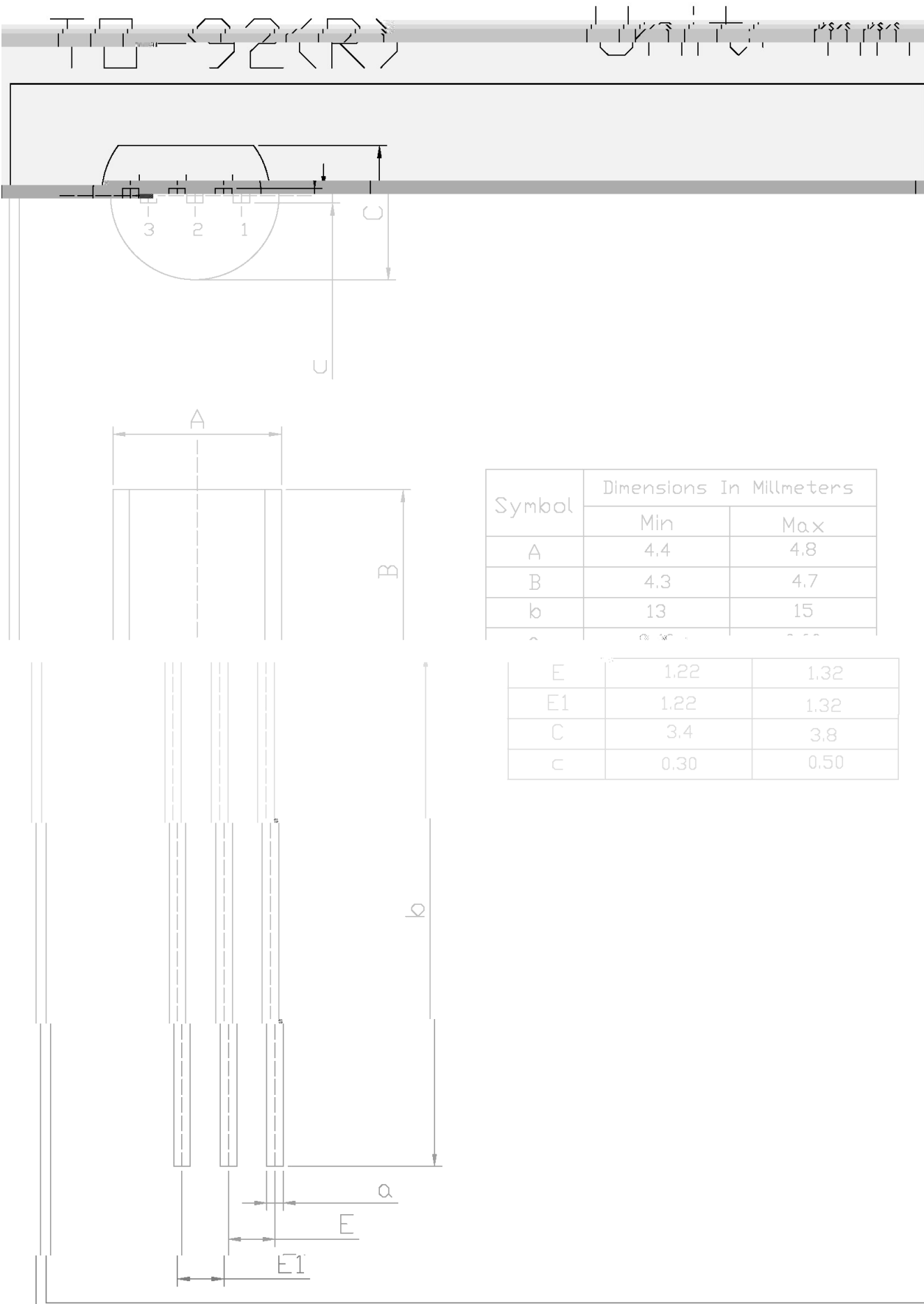
PIN1 Emitter      PIN 2 Base      PIN 3 Collector

|                                    |         |         |
|------------------------------------|---------|---------|
| $h_{FE}$ Classifications<br>Symbol | A       | B       |
| $h_{FE}$ Range                     | 110~220 | 200~450 |

| Parameter                      | Symbol    | Rating  | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$ | -50     | V    |
| Collector to Emitter Voltage   | $V_{CEO}$ | -45     | V    |
| Emitter to Base Voltage        | $V_{EBO}$ | -5.0    | V    |
| Collector Current - Continuous | $I_C$     | -100    | mA   |
| Collector Power Dissipation    | $P_C$     | 625     | mW   |
| Junction Temperature           | $T_j$     | 150     |      |
| Storage Temperature Range      | $T_{stg}$ | -55~150 |      |

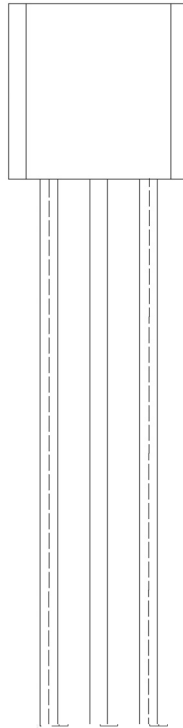
| Parameter                              | Symbol        | Test Conditions                                  | Min   | Typ  | Max    | Unit |
|----------------------------------------|---------------|--------------------------------------------------|-------|------|--------|------|
| Collector to Emitter Breakdown Voltage | $V_{CEO}$     | $I_C=-10mA$ $I_B=0$                              | -45   |      |        | V    |
| Collector to Base Breakdown Voltage    | $V_{CBO}$     | $I_C=-10 A$ $I_E=0$                              | -50   |      |        | V    |
| Emitter to Base Breakdown Voltage      | $V_{EBO}$     | $I_E=-10 A$ $I_C=0$                              | -5.0  |      |        | V    |
| Collector Cut-Off Current              | $I_{CBO}$     | $V_{CB}=-30V$ $I_E=0$                            |       |      | -0.015 | A    |
| DC Current Gain                        | $h_{FE}$      | $V_{CE}=-5.0V$ $I_C=-2.0mA$                      | 110   |      | 450    |      |
| Collector-Emitter Saturation Voltage   | $V_{CE(sat)}$ | $I_C=-100mA$ $I_B=-5.0mA$                        |       |      | -0.6   | V    |
| Base-Emitter Saturation Voltage        | $V_{BE(sat)}$ | $I_C=-100mA$ $I_B=-5.0mA$                        |       | -0.9 |        | V    |
| Base-Emitter Voltage                   | $V_{BE(on)}$  | $V_{CE}=-5.0V$ $I_C=-2.0mA$                      | -0.55 |      | -0.7   | V    |
| Transition Frequency                   | $f_T$         | $V_{CE}=-5.0V$ $f=100MHz$ $I_C=-10mA$            |       | 300  |        | MHz  |
| Current Gain Bandwidth Product         | $C_{ob}$      | $V_{CB}=-10V$ $f=1.0MHz$ $I_E=0$                 |       |      | 7.0    | pF   |
| Noise Figure                           | NF            | $V_{CE}=-5.0V$ $I_C=-200 A$ $R_g=10K$ $f=1.0KHz$ |       |      | 4.0    | dB   |

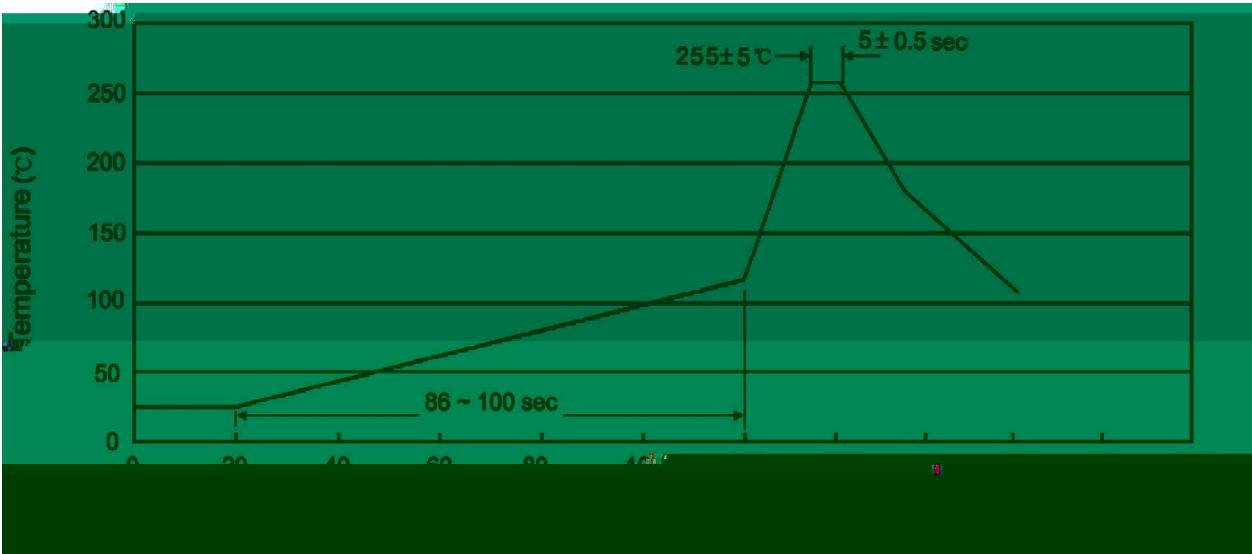




| Symbol | Dimensions In Millimeters |     |
|--------|---------------------------|-----|
|        | Min                       | Max |
| A      | 4.4                       | 4.8 |
| B      | 4.3                       | 4.7 |
| b      | 13                        | 15  |

|    |      |      |
|----|------|------|
| E  | 1.22 | 1.32 |
| E1 | 1.22 | 1.32 |
| C  | 3.4  | 3.8  |
| c  | 0.30 | 0.50 |





Note:

- |   |     |     |    |         |                                         |
|---|-----|-----|----|---------|-----------------------------------------|
| 1 | 25  | 150 | 60 | 90sec;  | 1.Preheating:25~150 , Time:60~90sec.    |
| 2 | 255 | 5   | 5  | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 |     | 2   | 10 | /sec.   | 3. Cooling Speed: 2~10 /sec.            |

270 5                      10 1 sec.                      Temp.:270±5                      Time:10±1 sec

/ BULK

| Package Type<br>封装形式 | Units 包装数量       |                       |                        |                              |                        | Dimension 包装尺寸 (unit: mm3) |             |             |
|----------------------|------------------|-----------------------|------------------------|------------------------------|------------------------|----------------------------|-------------|-------------|
|                      | 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-92                | 1,000            | 10                    | 10,000                 | 5                            | 50,000                 | 135×190                    | 237×172×102 | 560×245×195 |
|                      | 1,000            | 10                    | 10,000                 | 10                           | 100,000                | 135×190                    | 237×172×102 | 560×245×375 |

/ AMMO

| Package Type<br>封装形式 | Units 包装数量         |                        |                         |                              |                        | Dimension 包装尺寸 (unit: mm3) |                                   |
|----------------------|--------------------|------------------------|-------------------------|------------------------------|------------------------|----------------------------|-----------------------------------|
|                      | Units/tape<br>只/纸带 | Tape/Inner Box<br>纸带/盒 | Rows/Inner Box<br>纸带层/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Inner Box 盒                | Outer Box 箱                       |
| TO-92                | 3,000              | 1                      | 120                     | 10                           | 30,000                 | 328×230×42                 | 小箱 480×346×235,<br>大箱 547×407×268 |