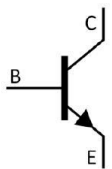


Silicon NPN transistor in a TO-92 Plastic Package.

High frequency.

High frequency amplifier.

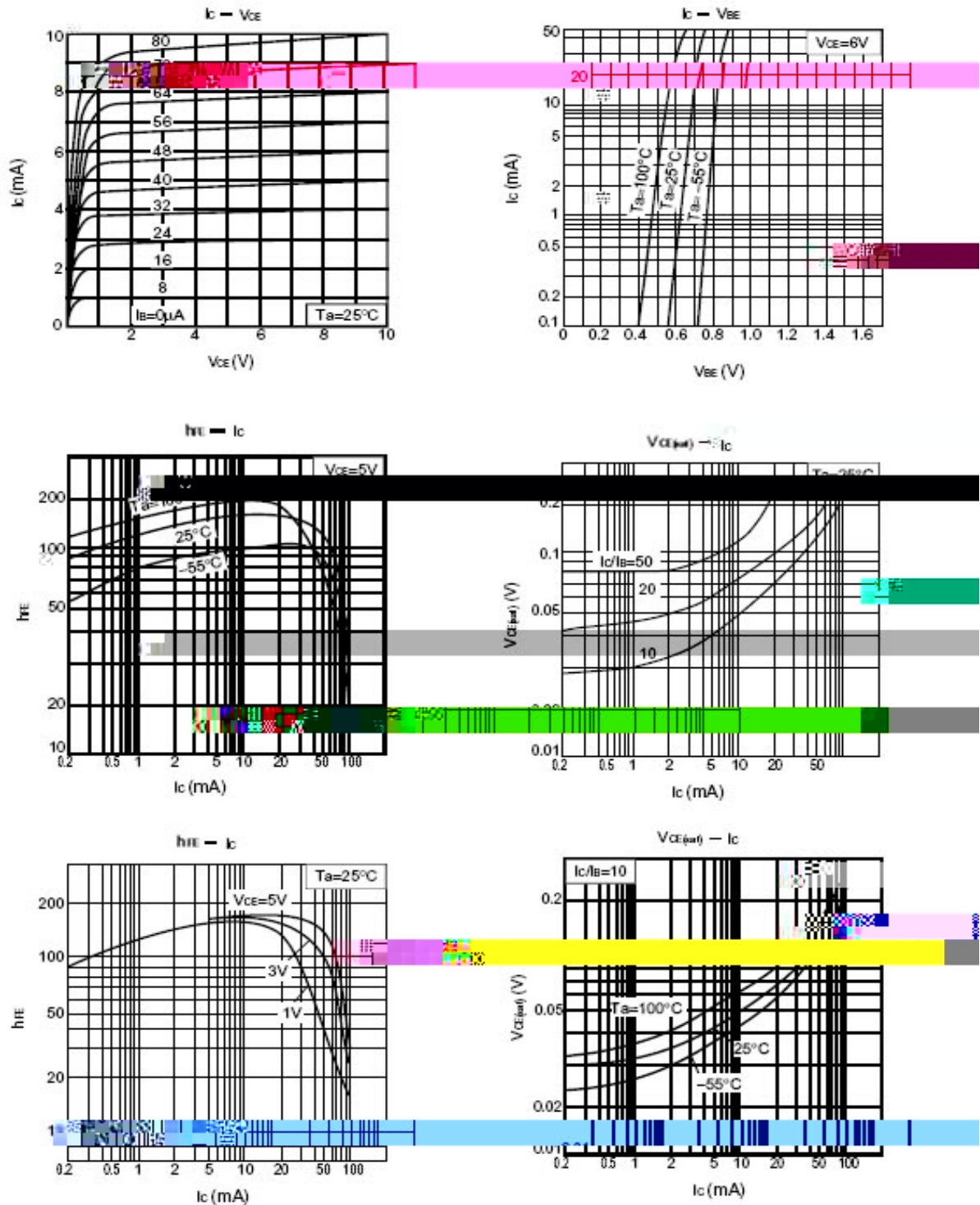


PIN1   Base      PIN 2   Collector      PIN 3   Emitter

|                                    |        |
|------------------------------------|--------|
| $h_{FE}$ Classifications<br>Symbol | P      |
| $h_{FE}$ Range                     | 82~180 |

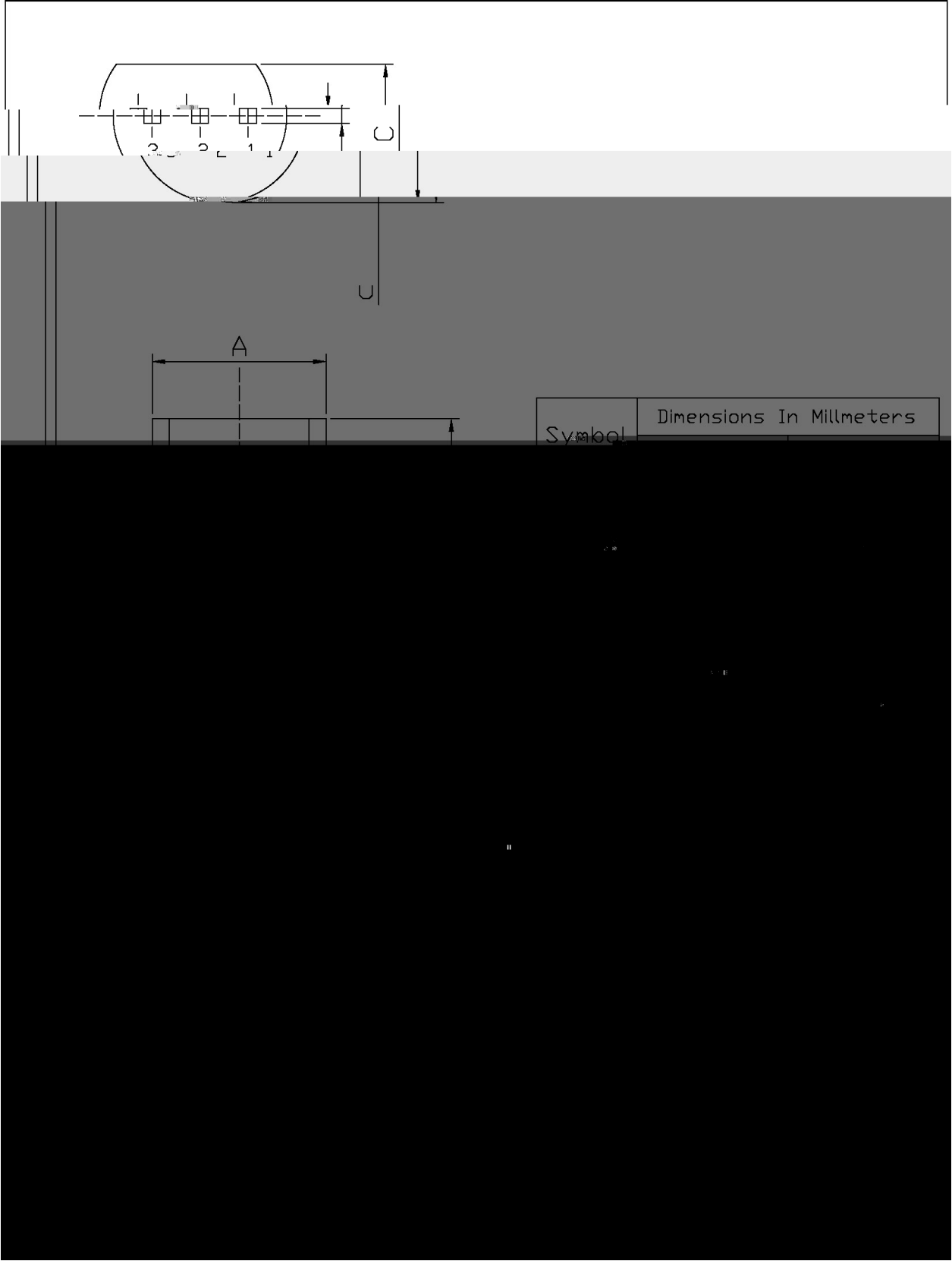
| Parameter                      | Symbol    | Rating  | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$ | 40      | V    |
| Collector to Emitter Voltage   | $V_{CEO}$ | 25      | V    |
| Emitter to Base Voltage        | $V_{EBO}$ | 5.0     | V    |
| Collector Current - Continuous | $I_C$     | 50      | mA   |
| Collector Power Dissipation    | $P_C$     | 300     | mW   |
| Junction Temperature           | $T_j$     | 150     |      |
| Storage Temperature Range      | $T_{stg}$ | -55 150 |      |

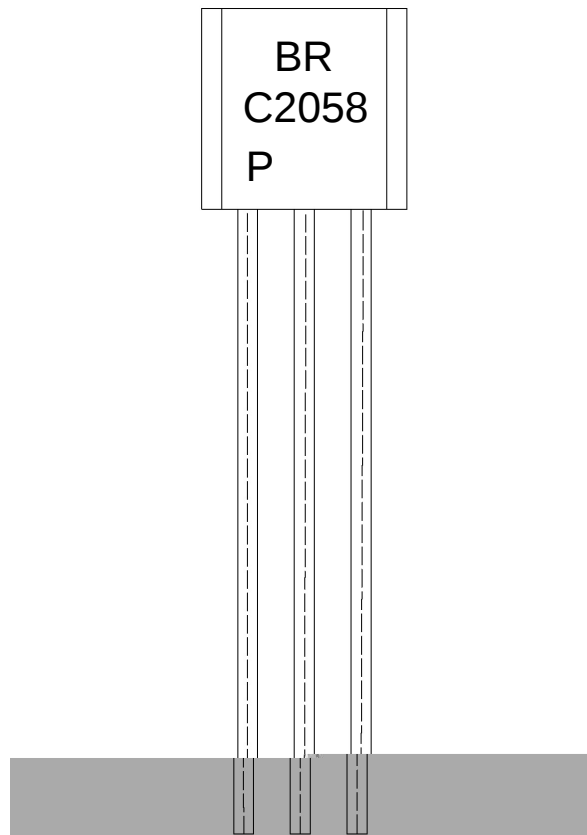
| Parameter                               | Symbol        | Test Conditions                                            | Min | Typ | Max | Unit |
|-----------------------------------------|---------------|------------------------------------------------------------|-----|-----|-----|------|
| Collector to Base Breakdown Voltage     | $V_{CBO}$     | $I_C=50\text{ A}$ $I_E=0$                                  | 40  |     |     | V    |
| Collector to Emitter Breakdown Voltage  | $V_{CEO}$     | $I_C=1.0\text{mA}$ $I_B=0$                                 | 25  |     |     | V    |
| Emitter to Base Breakdown Voltage       | $V_{EBO}$     | $I_E=50\text{ A}$ $I_C=0$                                  | 5.0 |     |     | V    |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=24\text{V}$ $I_E=0$                                |     |     | 0.5 | A    |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=3.0\text{V}$ $I_C=0$                               |     |     | 0.5 | A    |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=10\text{mA}$ $I_B=1.0\text{mA}$                       |     | 0.1 | 0.3 | V    |
| DC Current Gain                         | $h_{FE}$      | $V_{CE}=6.0\text{V}$ $I_C=1.0\text{mA}$                    | 82  |     | 180 |      |
| Transition Frequency                    | $f_T$         | $V_{CE}=6.0\text{V}$ $f=100\text{MHz}$ $I_E=-1.0\text{mA}$ | 150 | 300 |     | MHz  |
| Collector Output Capacitance            | $C_{ob}$      | $V_{CB}=6.0\text{V}$ $f=1.0\text{MHz}$ $I_E=0$             |     | 1.3 | 2.2 | pF   |



T0-92

Unit: mm





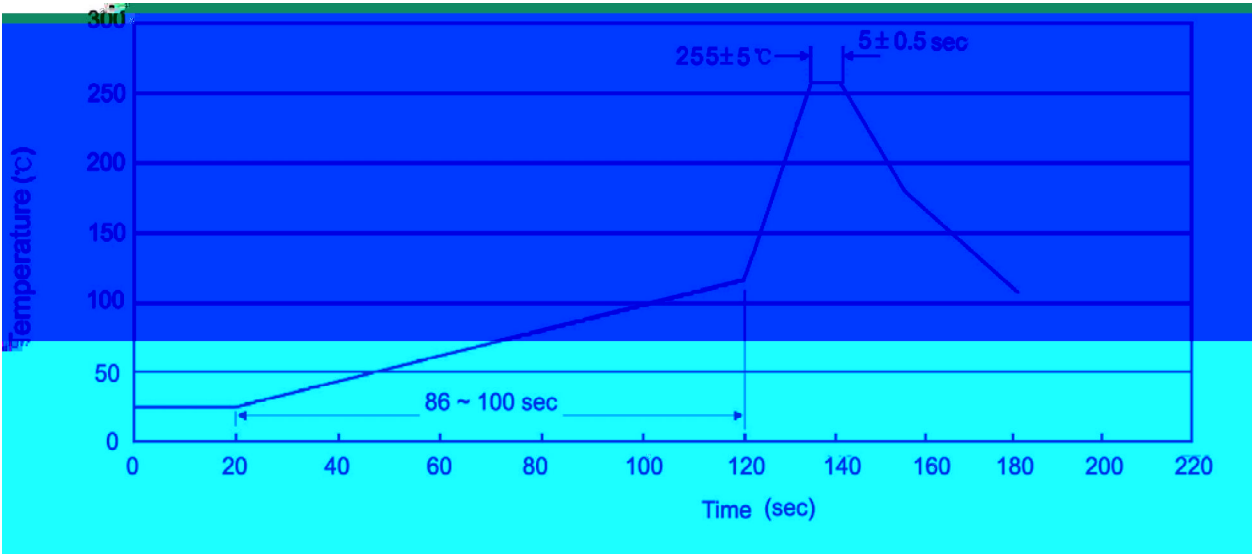
Note:

BR: Company Code.

C2058: Product Type.

P:  $h_{FE}$  Classifications Symbol

\*\*\*\*: Lot No. Code,code change with Lot No.



Note:

- 1

25 150

60 90sec;
- 2

255 5

5 0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

，Time:60~90sec.
- 2.Peak Temp.:255 5

，Duration:5 0.5sec.
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) |   |   |
|----------------------|------------|-----|-----|-----|-----|----------------------------|---|---|
|                      | 只 袋        | 袋 盒 | 只 盒 | 盒 箱 | 只 箱 | 袋                          | 盒 | 箱 |
|                      |            |     |     |     |     |                            |   |   |
|                      |            |     |     |     |     |                            |   |   |

/ AMMO

| Package Type<br>封装形式 | Units 包装数量 |      |       |     |     | Dimension 包装尺寸 (unit: mm3) |          |
|----------------------|------------|------|-------|-----|-----|----------------------------|----------|
|                      | 只 纸带       | 纸带 盒 | 纸带层 盒 | 盒 箱 | 只 箱 | 盒                          | 箱        |
|                      |            |      |       |     |     |                            | 小箱<br>大箱 |
|                      |            |      |       |     |     |                            |          |