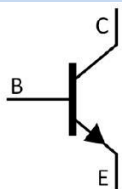


Silicon NPN transistor in a TO-92LM Plastic Package.

Low saturation voltage, high speed switching time, complementary to 2SA1020.

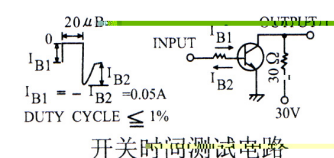
Power amplifier and switching applications.

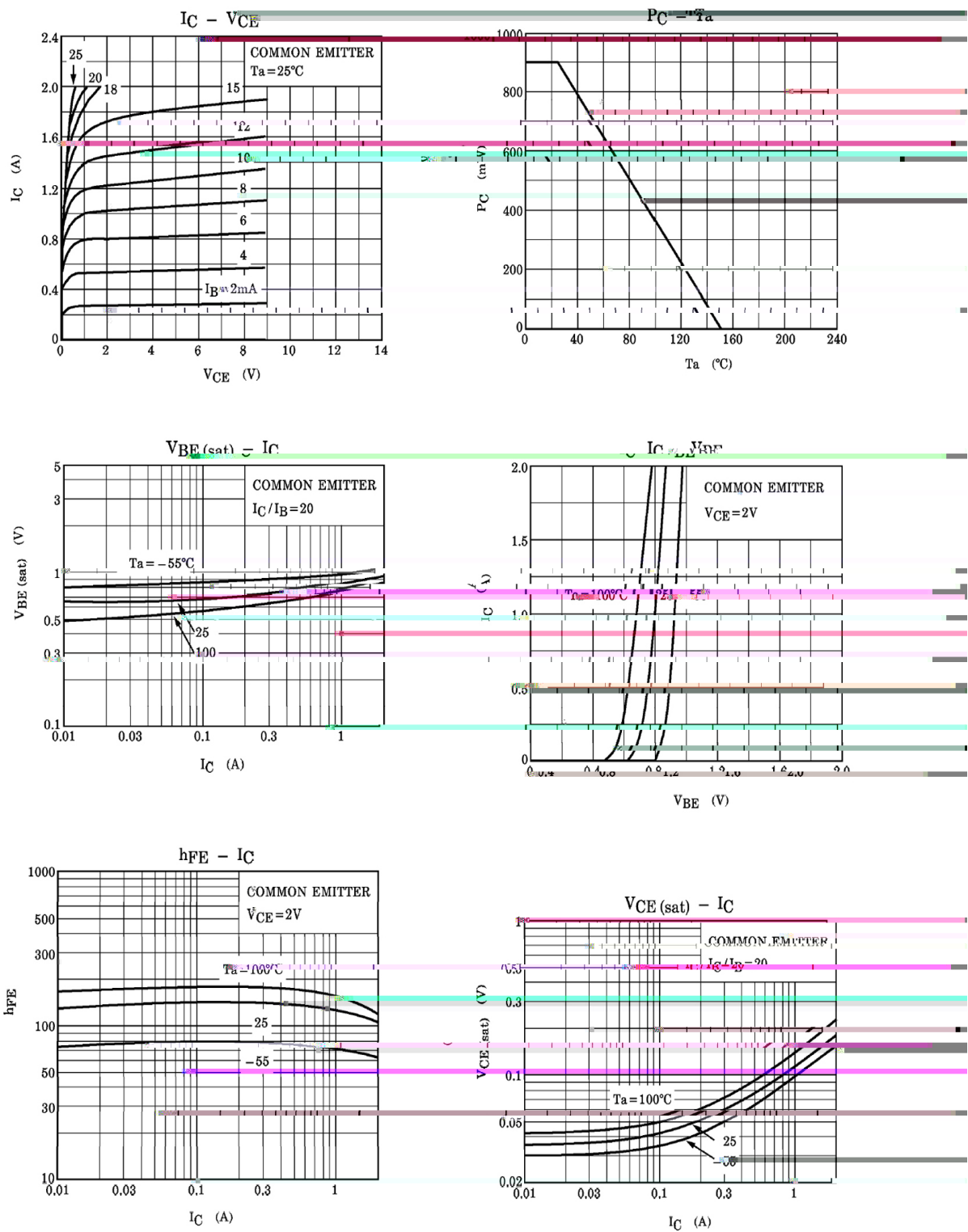


PIN1 Base      PIN 2 Collector      PIN 3 Emitter

| $h_{FE}$ Classifications<br>Symbol | O      | Y       | G       |
|------------------------------------|--------|---------|---------|
| $h_{FE}$ Range                     | 70 140 | 120 240 | 200-400 |

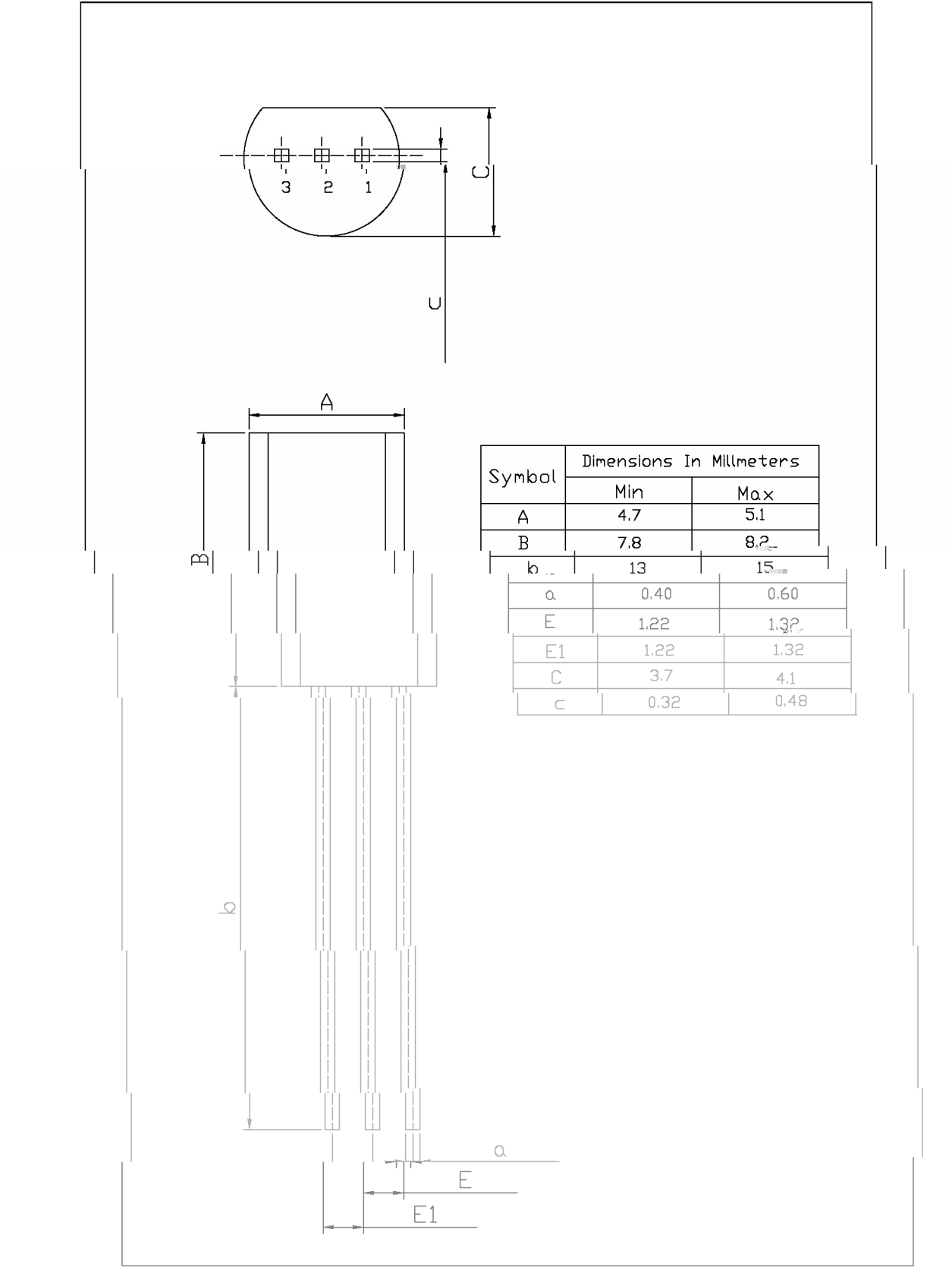
| Parameter                    | Symbol    | Rating  | Unit |
|------------------------------|-----------|---------|------|
| Collector to Base Voltage    | $V_{CBO}$ | 50      | V    |
| Collector to Emitter Voltage | $V_{CEO}$ | 50      | V    |
| Emitter to Base Voltage      | $V_{EBO}$ | 5.0     | V    |
| Collector Current (DC)       | $I_C$     | 2.0     | A    |
| Collector Power Dissipation  | $P_C$     | 900     | mW   |
| Junction Temperature         | $T_j$     | 150     |      |
| Storage Temperature Range    | $T_{stg}$ | -55 150 |      |

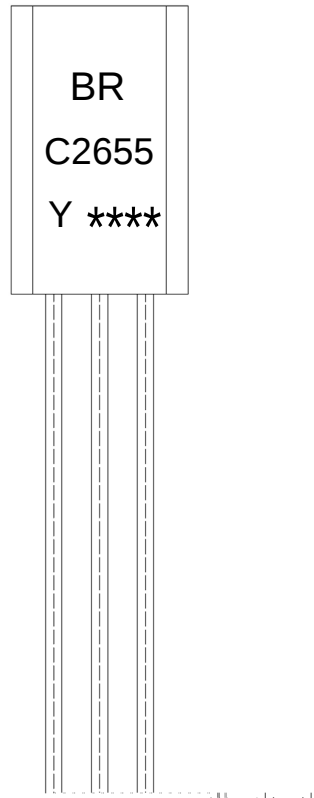
| Parameter                               | Symbol        | Test Conditions                                                                                      | Min | Typ | Max | Unit    |
|-----------------------------------------|---------------|------------------------------------------------------------------------------------------------------|-----|-----|-----|---------|
| Collector to Emitter Breakdown Voltage  | $V_{CEO}$     | $I_C=10mA$ $I_B=0$                                                                                   | 50  |     |     | V       |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=50V$ $I_E=0$                                                                                 |     |     | 1.0 | $\mu A$ |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=5.0V$ $I_C=0$                                                                                |     |     | 1.0 | $\mu A$ |
| DC Current Gain                         | $h_{FE(1)}$   | $V_{CE}=2.0V$ $I_C=0.5A$                                                                             | 70  |     | 400 |         |
|                                         | $h_{FE(2)}$   | $V_{CE}=2.0V$ $I_C=1.5A$                                                                             | 40  |     |     |         |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=1.0A$ $I_B=0.05A$                                                                               |     |     | 0.5 | V       |
| Base to Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=1.0A$ $I_B=0.05A$                                                                               |     |     | 1.2 | V       |
| Transition Frequency                    | $f_T$         | $V_{CE}=2.0V$ $I_C=0.5A$                                                                             | 50  | 100 |     | MHz     |
| Collector output capacitance            | $C_{ob}$      | $V_{CB}=10V$ $I_E=0$<br>$f=1.0MHz$                                                                   |     | 30  | 45  | pF      |
| Turn-On Time                            | $t_{on}$      |  <p>开关时间测试电路</p> |     | 0.1 |     | $\mu s$ |
| Turn-Off Time                           | $t_f$         |                                                                                                      |     | 0.1 |     | $\mu s$ |
| Storage Time                            | $t_{stg}$     |                                                                                                      |     | 1.0 |     | $\mu s$ |



T0-92LM

Unit: mm





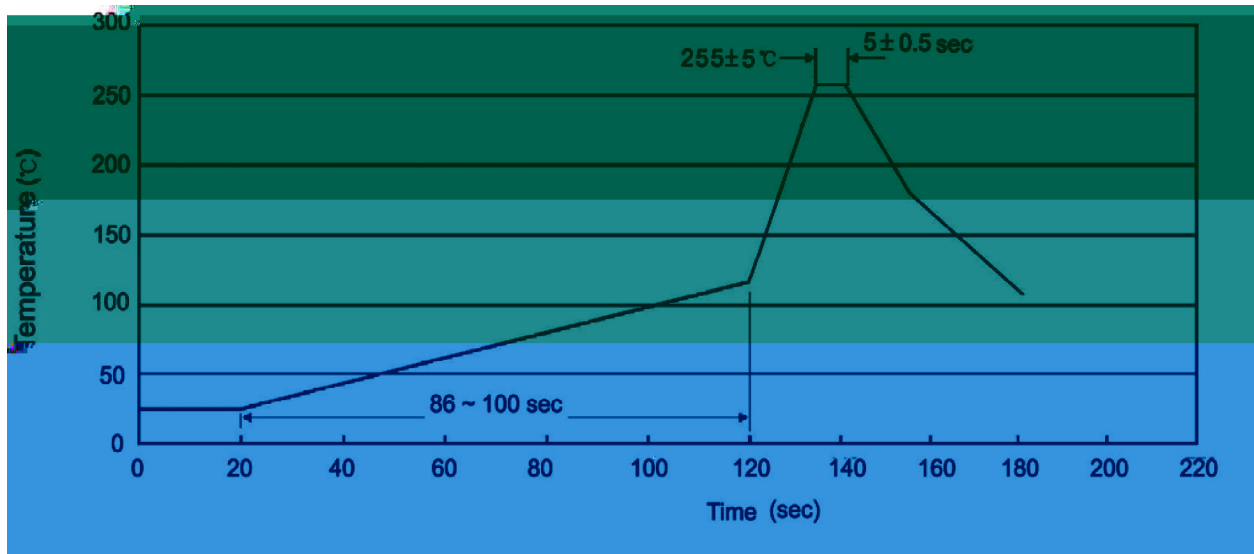
Note:

BR: Company Code.

C2655: Product Type.

Y:  $h_{FE}$  Classifications Symbol

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



Note:

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) |             |             |
|----------------------|------------------|-----------------------|------------------------|------------------------------|------------------------|----------------------------|-------------|-------------|
|                      | 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-92LM              | 1,000            | 8                     | 8,000                  | 5                            | 40,000                 | 135×190                    | 237×172×102 | 560×245×195 |

/ 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-92LM              | 2,500              | 1                      | 100                     | 10                           | 25,000                 | 328×230×42                 | 小箱 480×346×235<br>大箱 547×407×268 |