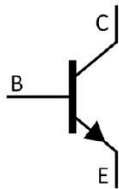


TO-92LM      NPN      Silicon NPN transistor in a TO-92LM Plastic Package.

Satisfactory linearity of forward current transfer ratio  $h_{FE}$ , High collector to emitter Voltage  $V_{CEO}$ , Small collector output capacitance  $C_{ob}$ .

### 2SA1124

For low-frequency high breakdown voltage amplification complementary to 2SA1124.

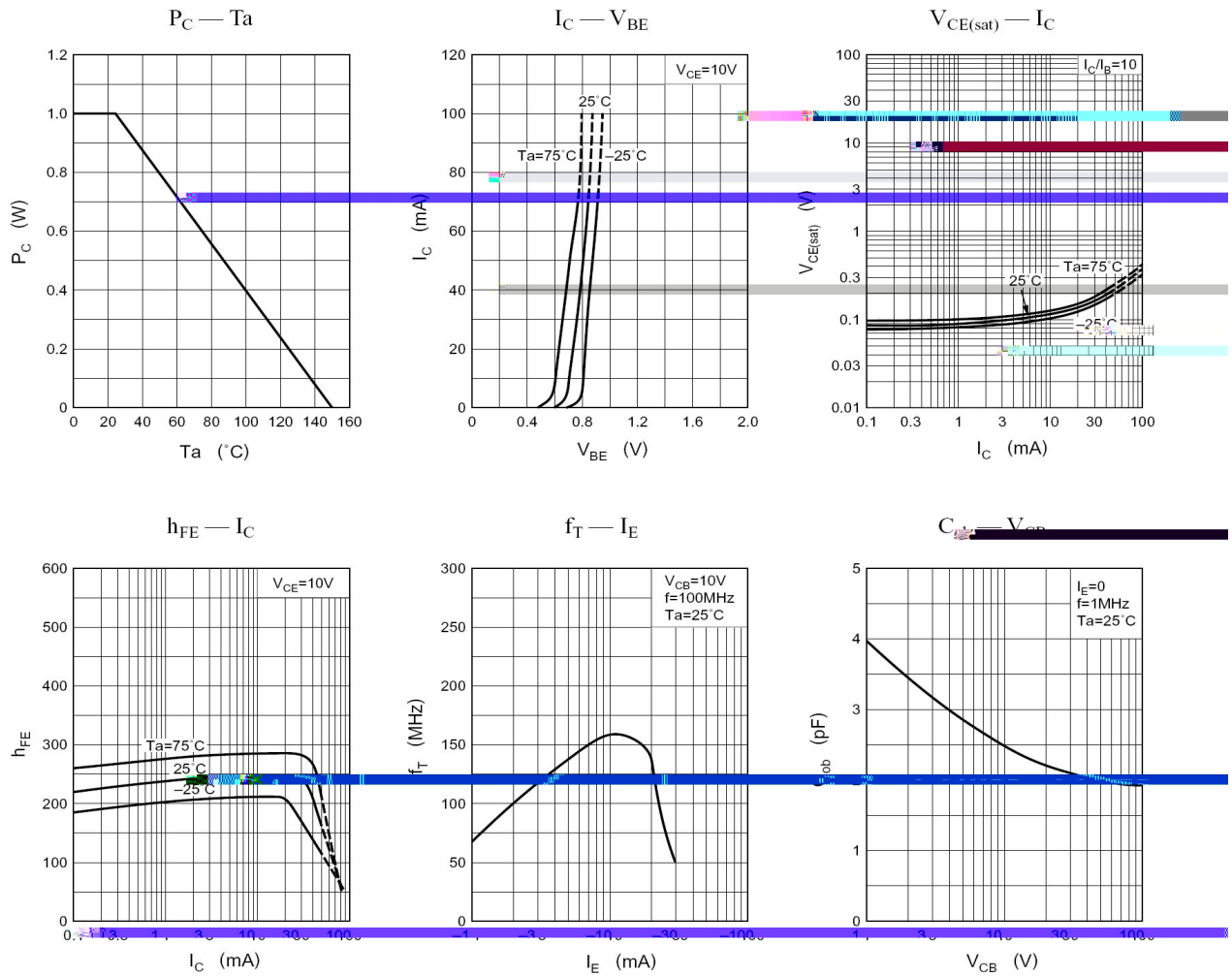


PIN1   Base      PIN 2   Collector      PIN 3   Emitter

| $h_{FE}$ Classifications<br>Symbol | R       | S       |
|------------------------------------|---------|---------|
| $h_{FE}$ Range                     | 130~220 | 185~330 |

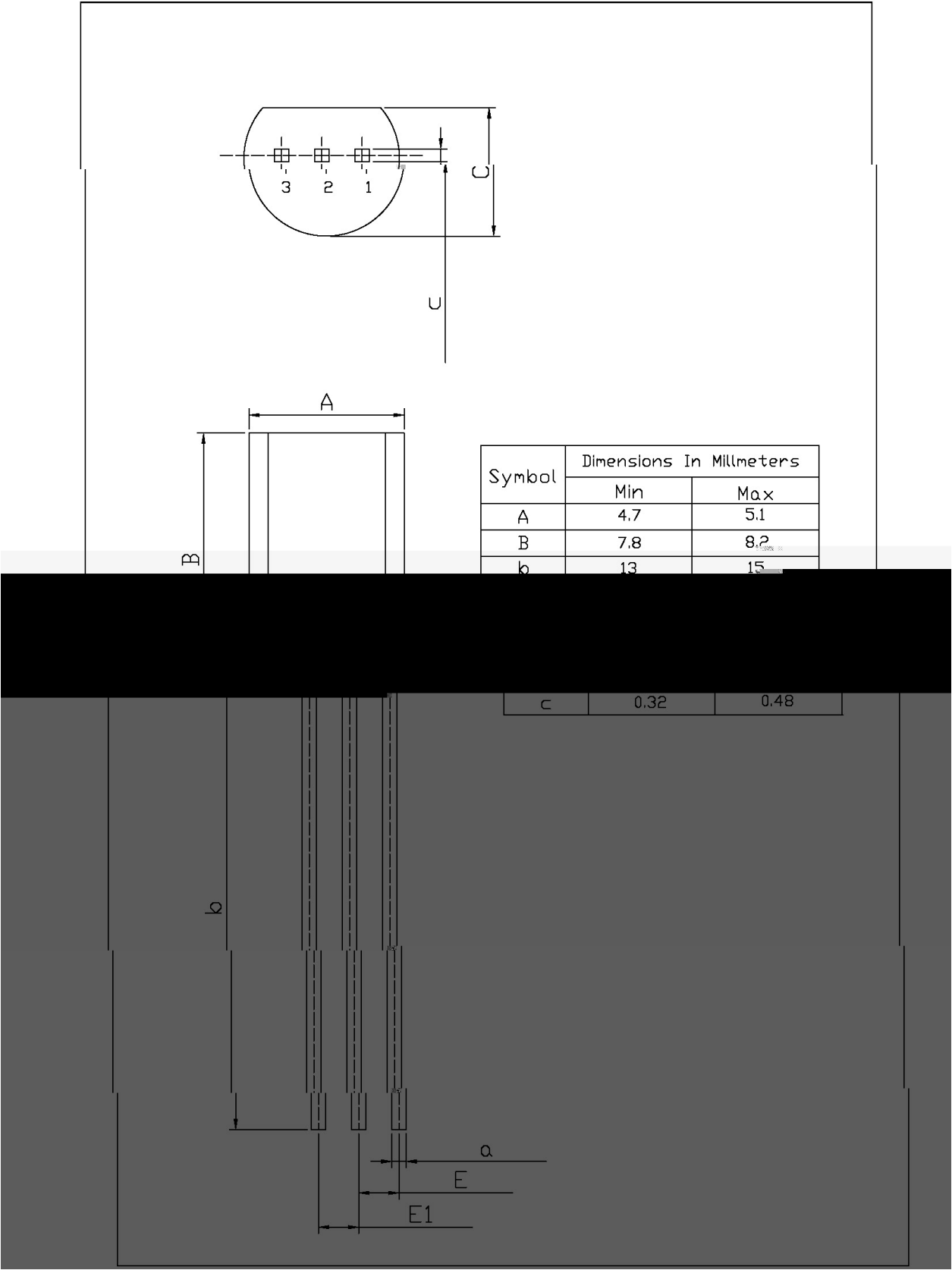
| Parameter                    | Symbol    | Rating  | Unit |
|------------------------------|-----------|---------|------|
| Collector to Base Voltage    | $V_{CBO}$ | 150     | V    |
| Collector to Emitter Voltage | $V_{CEO}$ | 150     | V    |
| Emitter to Base Voltage      | $V_{EBO}$ | 5       | V    |
| Collector Current (DC)       | $I_C$     | 50      | mA   |
| Collector Current (Pulse)    | $I_{CP}$  | 100     | mA   |
| Collector Power Dissipation  | $P_C$     | 1       | W    |
| Junction Temperature         | $T_J$     | 150     | °C   |
| Storage Temperature Range    | $T_{stg}$ | -55~150 | °C   |

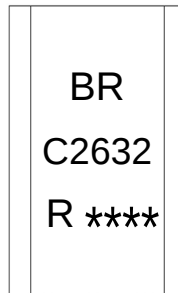
| Parameter                               | Symbol        | Test Conditions                                                  | Min | Typ | Max | Unit |
|-----------------------------------------|---------------|------------------------------------------------------------------|-----|-----|-----|------|
| Collector to Emitter Breakdown Voltage  | $V_{CEO}$     | $I_C=0.1mA$ $I_B=0$                                              | 150 |     |     | V    |
| Emitter to Base Breakdown Voltage       | $V_{EBO}$     | $I_E=10 A$ $I_C=0$                                               | 5   |     |     | V    |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=100V$ $I_E=0$                                            |     |     | 1   | A    |
| DC Current Gain                         | $h_{FE}$      | $V_{CE}=5V$ $I_C=10mA$                                           | 130 |     | 330 |      |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=30mA$ $I_B=3mA$                                             |     |     | 1   | V    |
| Transition Frequency                    | $f_T$         | $V_{CB}=10V$ $I_E=-10mA$<br>$f=200MHz$                           |     | 160 |     | MHz  |
| Collector Output Capacitance            | $C_{ob}$      | $V_{CB}=10V$ $I_E=0$<br>$f=1MHz$                                 |     |     | 3   | pF   |
| Noise Voltage                           | NV            | $V_{CE}=10V$ $I_C=1mA$<br>$G_V=80dB$ $R_g=100k$<br>Function=FLAT |     | 150 | 300 | mV   |



TO-92LM

Unit: mm





BR:

C2632

R:  $h_{FE}$

\*\*\*\*

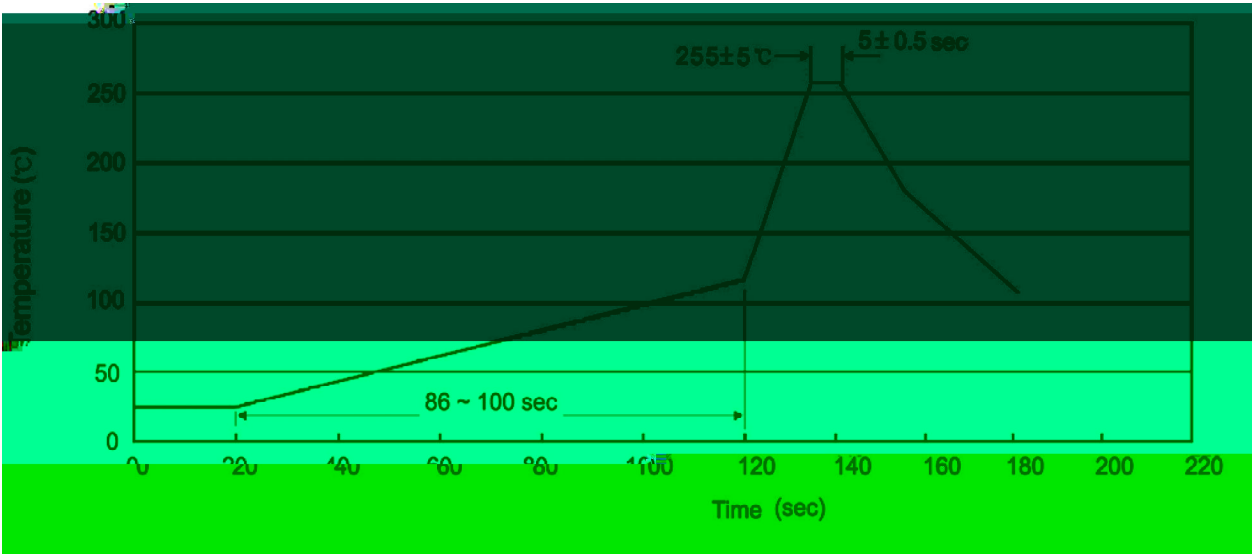
Note:

BR: Company Code.

C2632: Product Type.

R:  $h_{FE}$  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 | Units     |                |                 |                       |                 | Dimension (unit mm3) |             |             |
|--------------|-----------|----------------|-----------------|-----------------------|-----------------|----------------------|-------------|-------------|
|              | Units/Bag | Bags/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box | Bag                  | Inner Box   | Outer Box   |
| TO-92LM      | 1,000     | 8              | 8,000           | 5                     | 40,000          | 135×190              | 237×172×102 | 560×245×195 |

/ AMMO

| Package Type | Units      |                |                |                       |                 | Dimension (unit mm3) |                            |
|--------------|------------|----------------|----------------|-----------------------|-----------------|----------------------|----------------------------|
|              | Units/tape | Tape/Inner Box | Rows/Inner Box | Inner Boxes/Outer Box | Units/Outer Box | Inner Box            | Outer Box                  |
| TO-92LM      | 2,500      | 1              | 100            | 10                    | 25,000          | 328×230×42           | 480×346×235<br>547×407×268 |