## / Descriptions

TO-220 PNP Silicon PNP transistor in a TO-220 Plastic Package.

## / Features

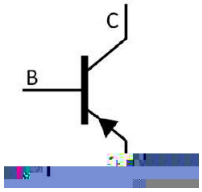
- MJE15030

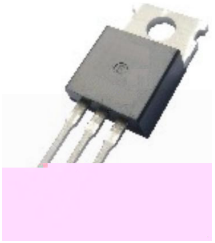
High DC current gain, High $V_{CEO}$, High $f_T$, Complementary pair with MJE15030.

## / Applications

Designed for us as high-frequency drivers in audio amplifiers.

## / Equivalent Circuit



PIN1 Base PIN 2 Collector PIN 3 Emitter

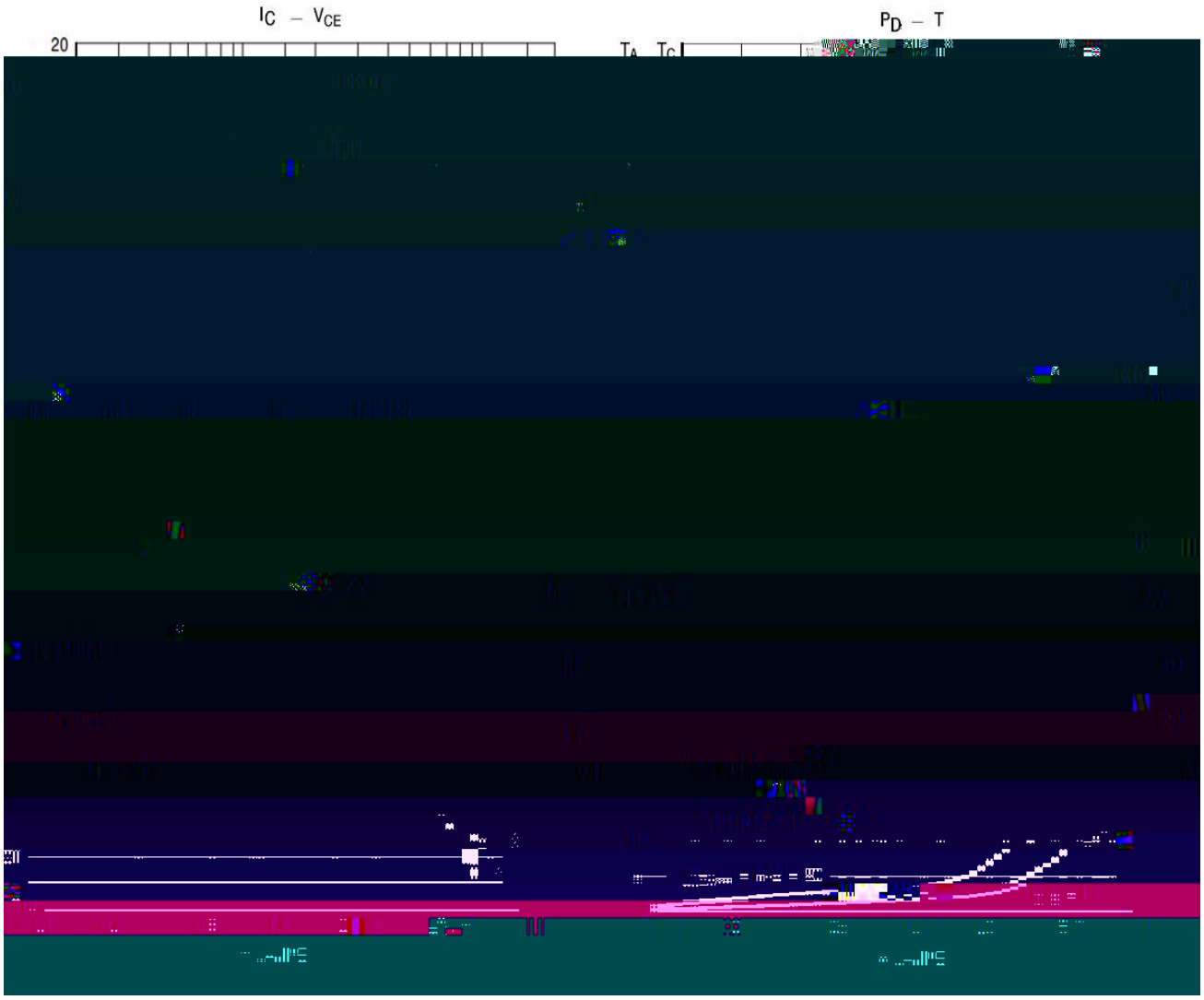
## / $h_{FE}$ Classifications & Marking

See Marking Instructions.

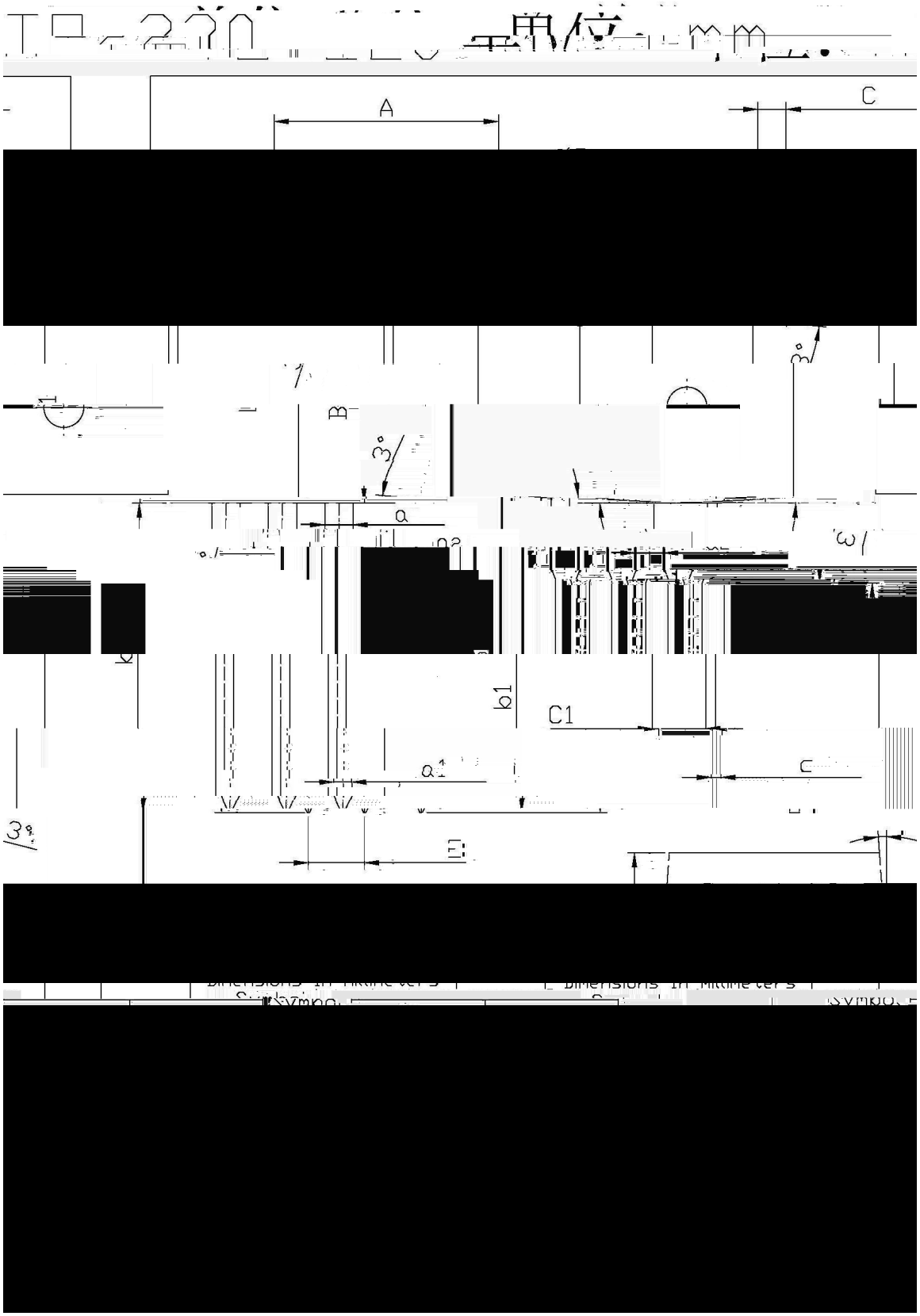
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | -150 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | -150 | V |
| Emitter to Base Voltage | $V_{EBO}$ | -5.0 | V |
| Collector Current - Continuous | $I_C$ | -8.0 | A |
| Base Current- Continuous | $I_B$ | -2.0 | A |
| Total Power Dissipation | $P_D$ | 2.0 | W |
| | $P_D$(Tc=25 ) | 50 | W |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -65 150 | |
| Thermal Resistance Junction-to-Case | $R_{JC}$ | 2.5 | /W |
| Thermal Resistance Junction-to-Ambient | $R_{JA}$ | 62.5 | /W |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to Emitter Breakdown Voltage* | *$V_{CEO}$ | $I_C$=-10mA $I_B$=0 | -150 | | | V |
| Collector Cut-Off Current | $I_{CEO}$ | $V_{CE}$=-150V $I_B$=0 | | | -0.1 | mA |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=-150V $I_E$=0 | | | -10 | A |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{BE}$=-5V I | | TA4 | | |

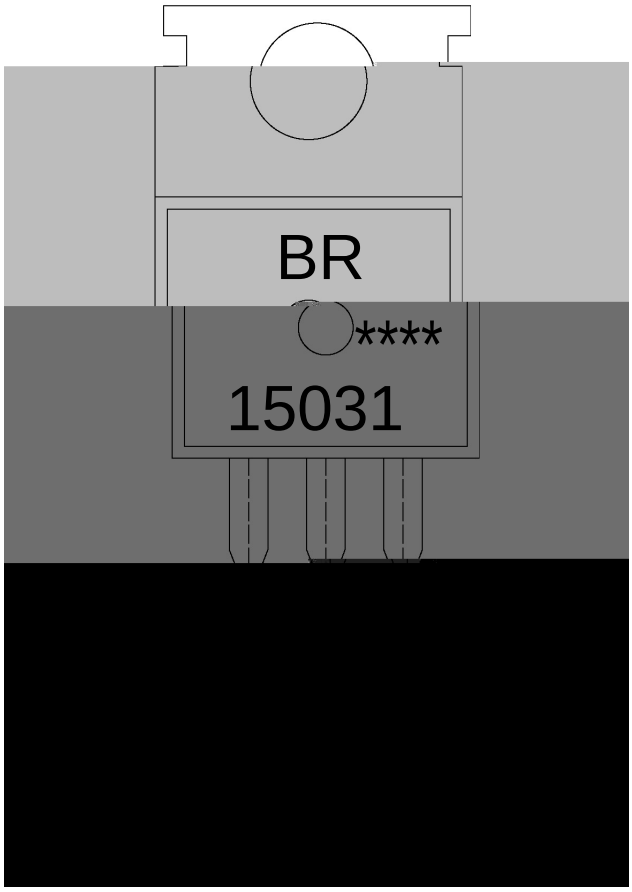
## / Electrical Characteristic Curve



## / Package Dimensions



## / Marking Instructions




BR

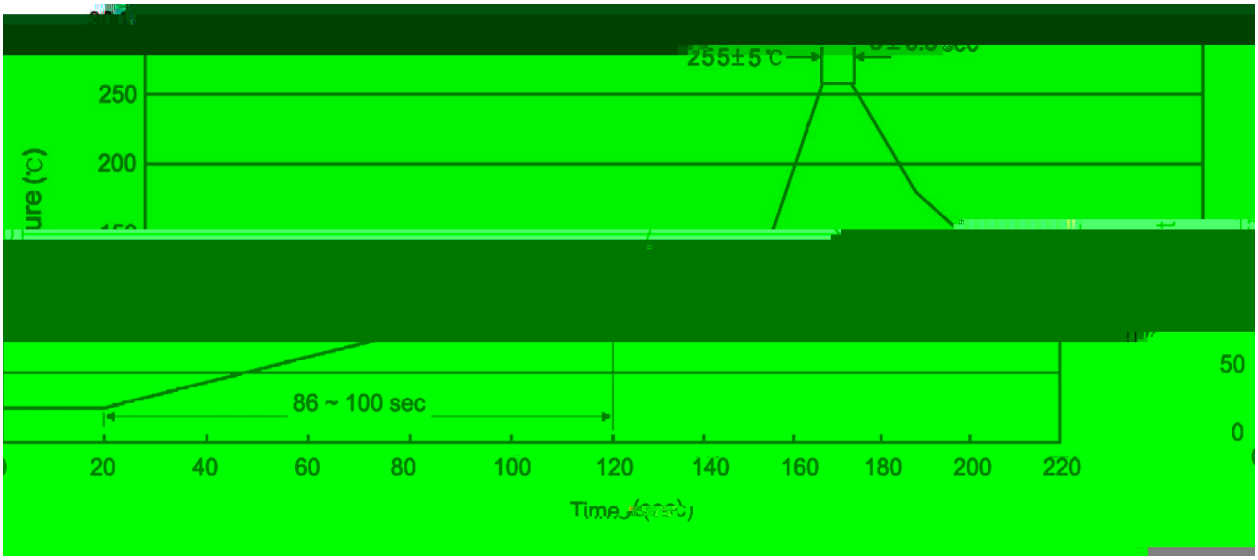
15031

****

Note:

| | |
|---|---|
| BR: | Company Code |
| 15031: | Product Type. |
| ****: | Lot No. Code, code change with Lot No. |

## ( ) / Temperature Profile for Dip Soldering(Pb-Free)




| | | | | |
|---|---|---|---|---|
| 1 | 25 150 | 60 | 90sec; | Note:<br>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. |

## / Resistance to Soldering Heat Test Conditions

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

## / Packaging SPEC.

### / 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-220/F | 200 | 10 | 2,000 | 5 | 10,000 | 135×190 | 237×172×102 | 560×245×195 |

### / TUBE

| Package Type | Units | | | | | Dimension | | (unit mm³) |
|---|---|---|---|---|---|---|---|---|
| | Units/Tube / | Tubes/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Tube | Inner Box | Outer Box |
| TO-220/F | 50 | 20 | 1,000 | 5 | 5,000 | 532×31.4×5.5 | 555×164×50 | 575×290×180 |

## / Notices