

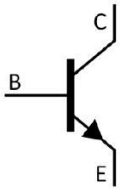
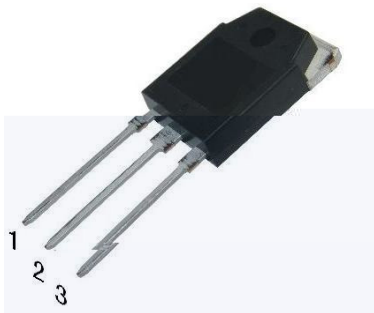
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TO-3P      NPN      Silicon NPN transistor in a TO-3P Plastic Package.

100W      2SA1943

Recommend for 100W high fidelity audio frequency amplifier output stage, Complementary to 2SA1943.

Power amplifier applications.



PIN1   Base      PIN 2   Collector      PIN 3   Emitter

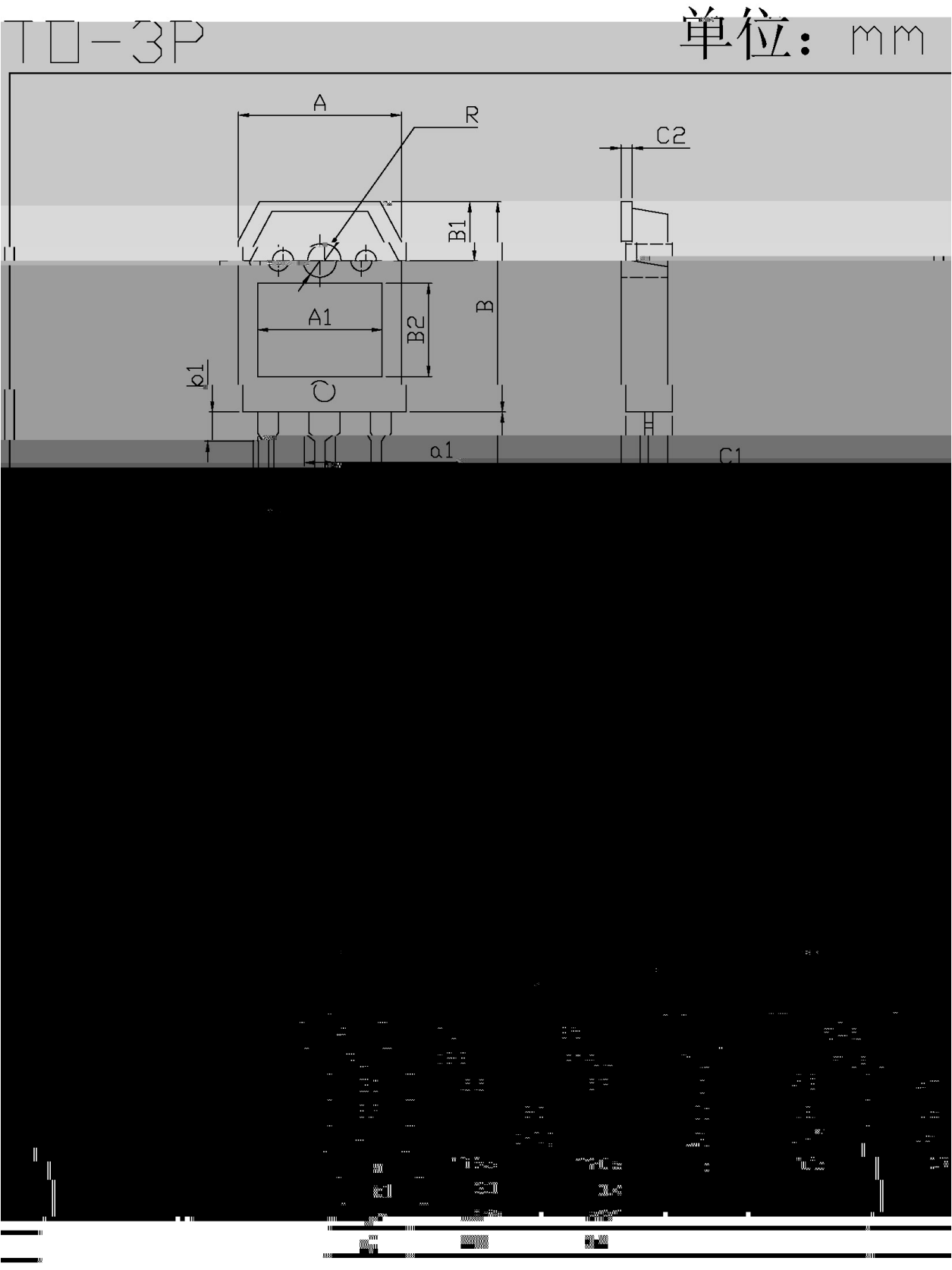
|                                    |        |        |
|------------------------------------|--------|--------|
| $h_{FE}$ Classifications<br>Symbol | R      | O      |
| $h_{FE}$ Range                     | 55~110 | 80~160 |

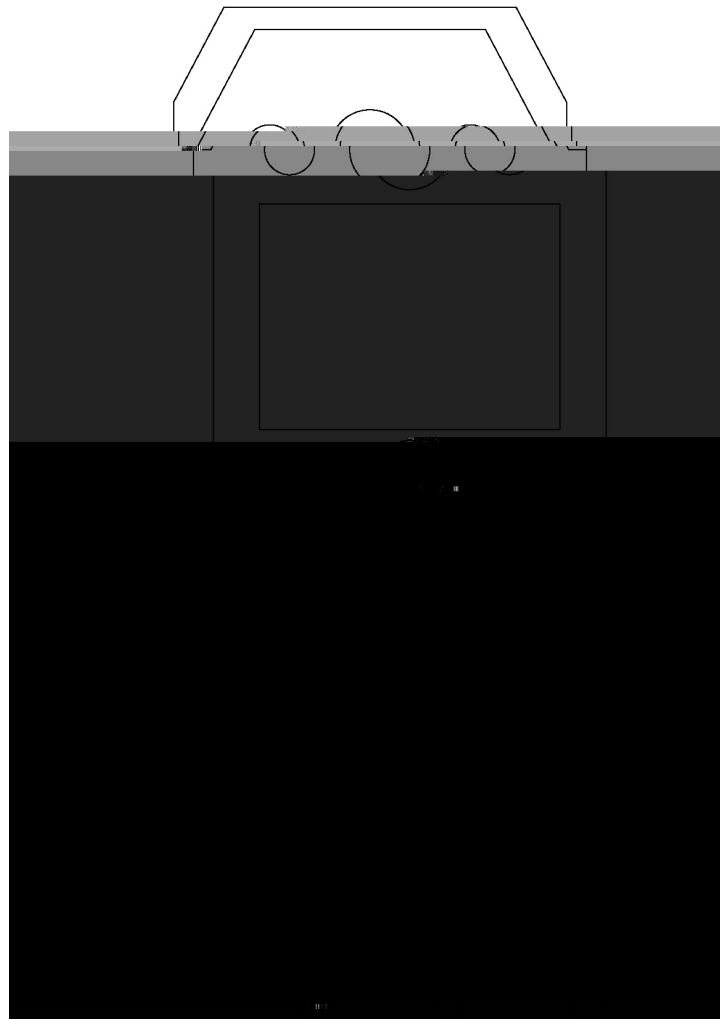
| Parameter                      | Symbol               | Rating  | Unit |
|--------------------------------|----------------------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$            | 230     | V    |
| Collector to Emitter Voltage   | $V_{CEO}$            | 230     | V    |
| Emitter to Base Voltage        | $V_{EBO}$            | 5       | V    |
| Collector Current - Continuous | $I_C$                | 15      | A    |
| Peak Collector Current         | $I_{CP}$             | 30      | A    |
| Base Current                   | $I_B$                | 1.5     | A    |
| Collector Power Dissipation    | $P_{C(TC=25^\circ)}$ | 150     | W    |
| 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     | $V_{CBO}$     | $I_C=50mA$ $I_B=0$       | 230 |     |     | V       |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=230V$ $I_E=0$    |     |     | 5   | $\mu A$ |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=5.0V$ $I_C=0$    |     |     | 5   | $\mu A$ |
| DC Current Gain                         | $h_{FE(1)}$   | $V_{CE}=5.0V$ $I_C=1.0A$ | 55  |     | 160 |         |
|                                         | $h_{FE(2)}$   | $V_{CE}=5.0V$ $I_C=7.0A$ | 35  | 60  |     |         |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=8.0A$ $I_B=0.8A$    |     | 0.4 | 3   | V       |
| Base to Emitter Voltage                 | $V_{BE}$      | $V_{CE}=5.0V$ $I_C=7.0A$ |     | 1   | 1.5 | V       |
| Transition Frequency                    | $f_T$         | $V_{CE}=5.0V$ $I_C=1.0A$ |     | 30  |     | MHz     |

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BR

C5200

O:  $h_{FE}$

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Note:

BR: Company Code.

C5200: Product Typm

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