

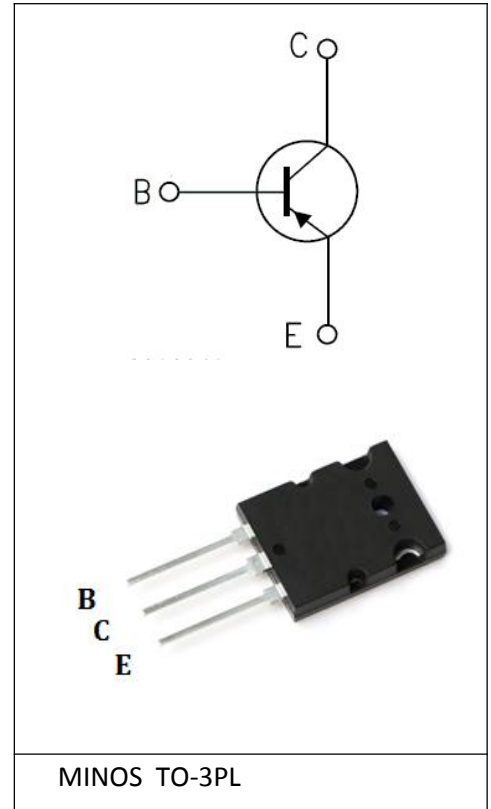
Minos Silicon PNP Epitaxial Type

TTA1943

Power Amplifier Applications

- Complementary to TTC5200
- High collector voltage: $V_{CEO} = -230V$ (min)
- Recommended for 100-W high-fidelity audio frequency amplifier Output stage

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.



Absolute Maximum Ratings($T_c=25^{\circ}C$):

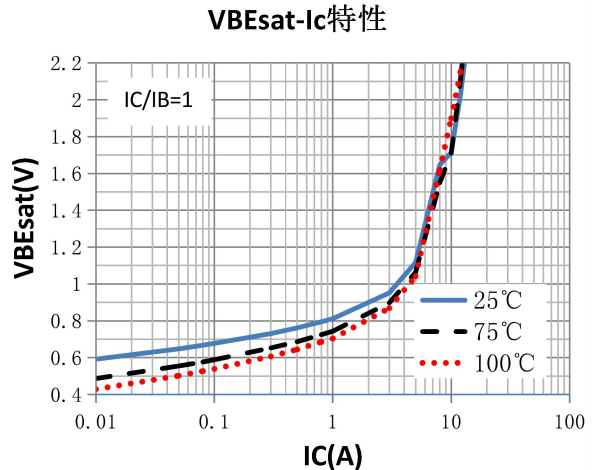
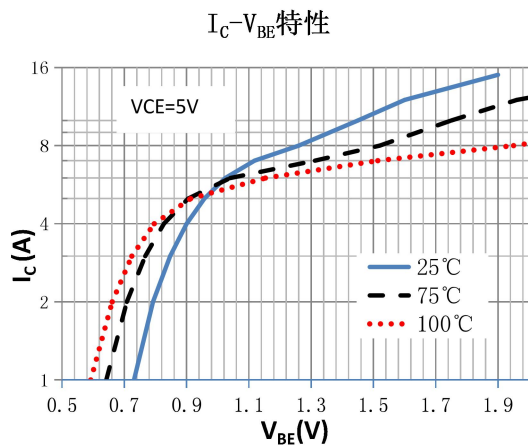
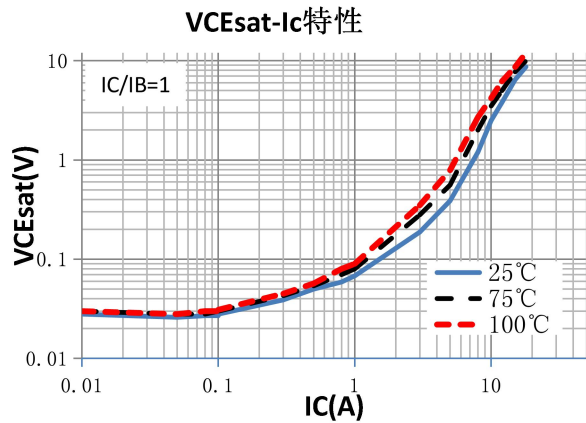
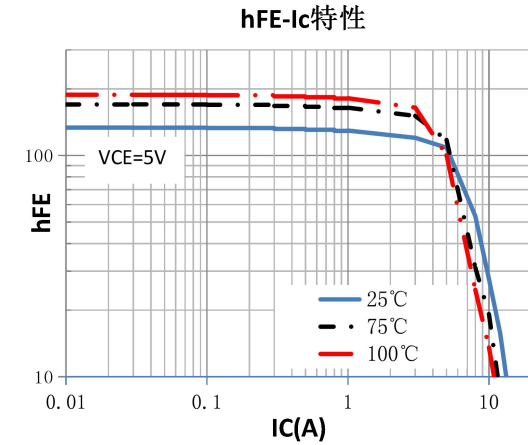
| Characteristics | Symbol | Rating | Unit |
|---|-----------|---------|-------------|
| Collector-base voltage | V_{CBO} | -230 | V |
| Collector-emitter voltage | V_{CEO} | -230 | V |
| Emitter-base voltage | V_{EBO} | -5 | V |
| Collector current | I_c | -15 | A |
| Base current | I_B | -1.5 | A |
| Collector power dissipation ($T_c=25^{\circ}C$) | P_c | 150 | W |
| Junction temperature | T_j | 150 | $^{\circ}C$ |
| Storage temperature range | T_{STG} | -55~150 | $^{\circ}C$ |

Electrical Characteristics (Tc=25°C):

| Characteristics | Symbol | Test Condition | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|--|------|-----|-------|------|
| Collector cut-off current | I _{CBO} | V _{CB} =-230V; I _E =0 | | | -10.0 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} =-5V; I _C =0 | | | -10.0 | μA |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C =-50mA; I _B =0 | -230 | | | V |
| DC current gain | h _{FE} | I _C =-5A; V _{CE} =-1V | 80 | | 160 | |
| | h _{FE(2)} | I _C =-5A; V _{CE} =-7V | 35 | | | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =-8A; I _B =-0.8A | | | -3.0 | V |
| Base-emitter voltage | V _{BE} | V _{CE} =-5V; I _C =-7A | | | -1.5 | V |
| Transition frequency | f _T | V _{CE} =-5V; I _C =-1A | | 30 | | MHz |

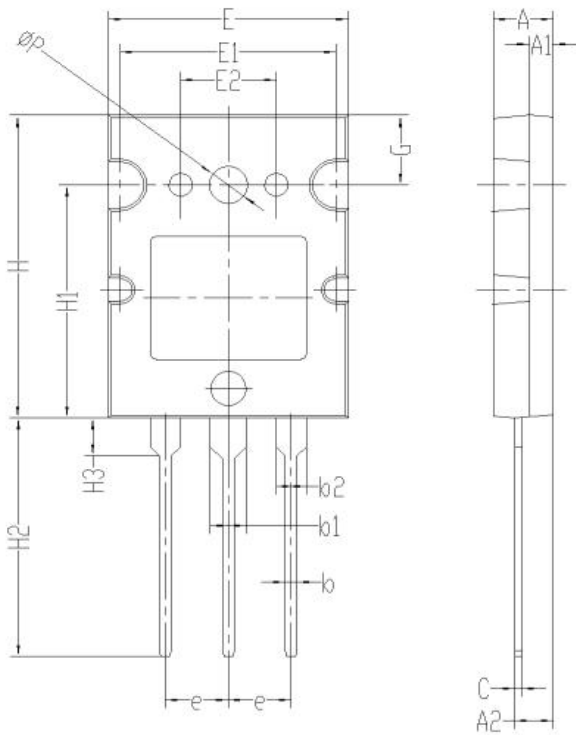
| Symbol | Parameter | Typ | Units |
|------------------|------------------|------|-------|
| R _{θJC} | Junction-to-Case | 0.35 | °C/W |

TYPICAL CHARACTERISTICS



Package Information

TO-3PL PACKAGE



| Symbol | Dimensions (millimeters) | |
|----------|--------------------------|------|
| | Min. | Max. |
| A | 4.80 | 5.20 |
| A1 | 1.80 | 2.20 |
| A2 | 3.00 | 3.40 |
| b | 0.80 | 1.20 |
| b1 | 2.80 | 3.20 |
| b2 | 2.30 | 2.70 |
| c | 0.40 | 0.80 |
| e | 5.25 | 5.65 |
| E | 19.8 | 20.2 |
| E1 | 17.8 | 18.2 |
| E2 | 7.8 | 8.2 |
| H | 25.8 | 26.2 |
| H1 | 19.8 | 20.2 |
| H2 | 20.0 | 21.0 |
| H3 | 3.05 | 3.45 |
| G | 5.80 | 6.20 |
| ΦP | 3.10 | 3.50 |
| J | 4.80 | 5.20 |
| K | 1.80 | 2.20 |