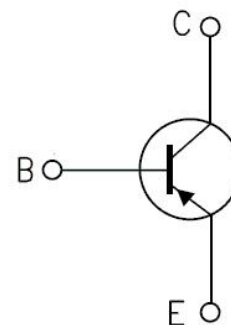
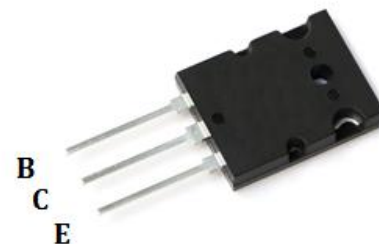


### Power Amplifier Applications

- 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.



TO-3PL

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

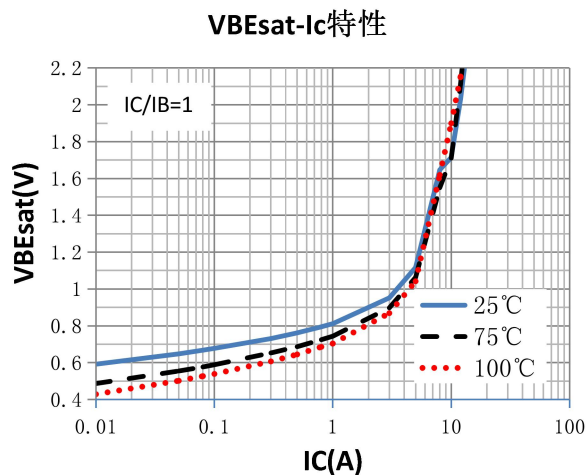
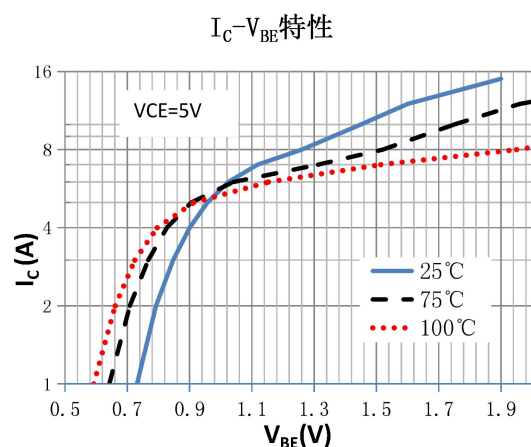
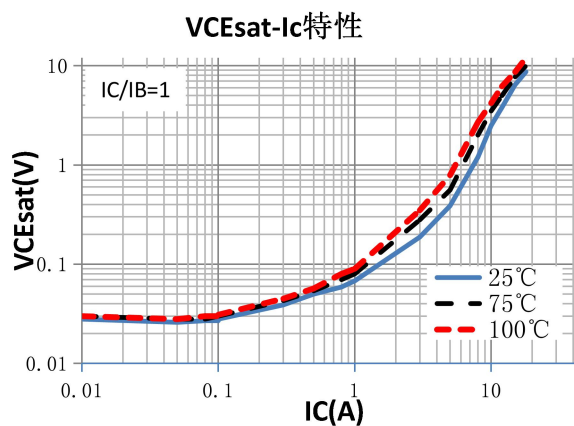
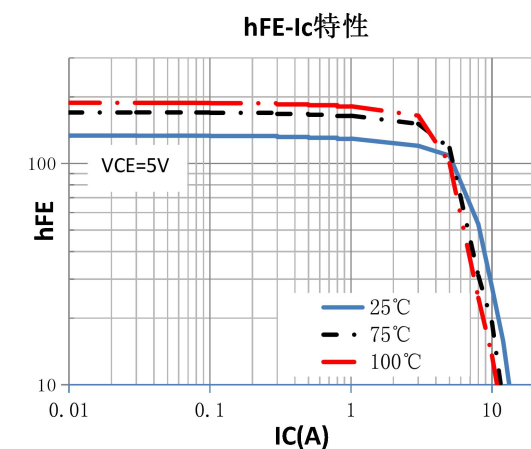
Characteristics	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-230	V
Collector-emitter voltage	$V_{CEO}$	-230	V
Emitter-base voltage	$V_{EBO}$	-5	V
Collector current	$I_c$	-15	A
Base current	$I_B$	-1.5	A
Collector power dissipation ( $T_c=25^\circ C$ )	$P_c$	150	W
Junction temperature	$T_j$	150	$^\circ C$
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 <sub>CBO</sub>	V <sub>CB</sub> =-230V; I <sub>E</sub> =0			-10.0	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-10.0	μA
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-50mA; I <sub>B</sub> =0	-230			V
DC current gain	h <sub>FE</sub>	I <sub>C</sub> =-5A; V <sub>CE</sub> =-1V	80		160	
	h <sub>FE(2)</sub>	I <sub>C</sub> =-5A; V <sub>CE</sub> =-7V	35			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-8A; I <sub>B</sub> =-0.8A			-3.0	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =-5V; I <sub>C</sub> =-7A			-1.5	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-5V; I <sub>C</sub> =-1A		30		MHz

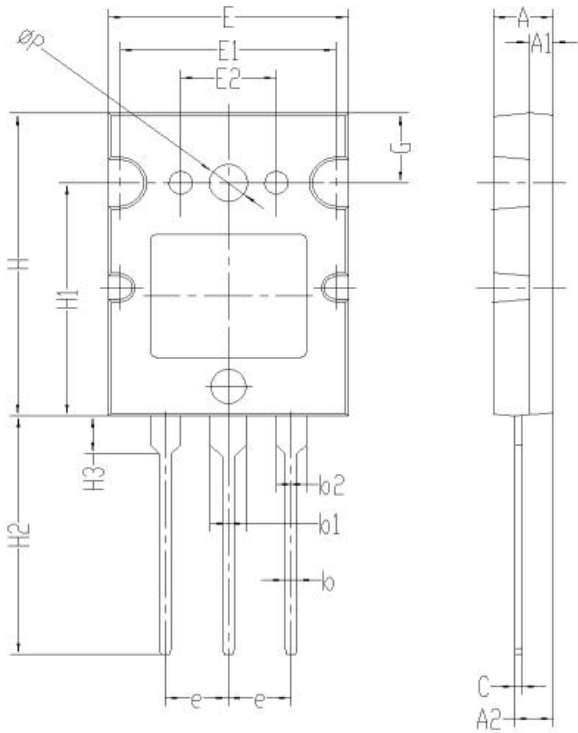
Symbol	Parameter	Typ	Units
R <sub>θJC</sub>	Junction-to-Case	0.35	°C/W

### 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