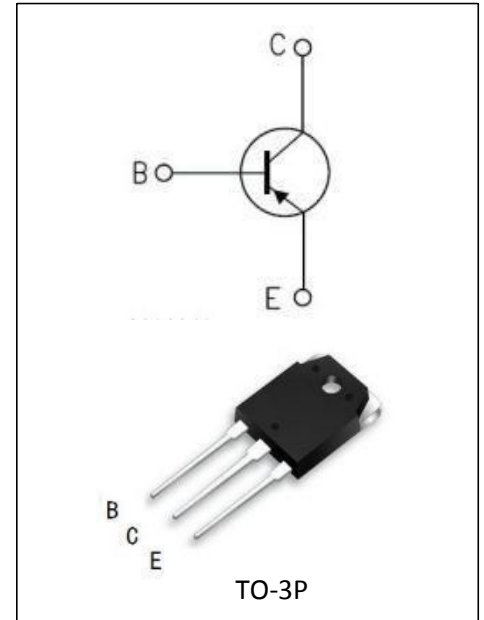


Power Amplifier Applications

- ① Complementary to NJW0281G
- ② High collector voltage: $V_{CEO} = -230V$ (min)
- ③ 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.



Package Marking And Ordering Information

Ordering Codes	Package	Product Code	Packing
NJW0302G	TO-3P	NJW0302G	Tube

Absolute Maximum (°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°C)	P_C	150	W
Junction temperature	T_j	150	°C
Storage temperature range	T_{STG}	-55~150	°C

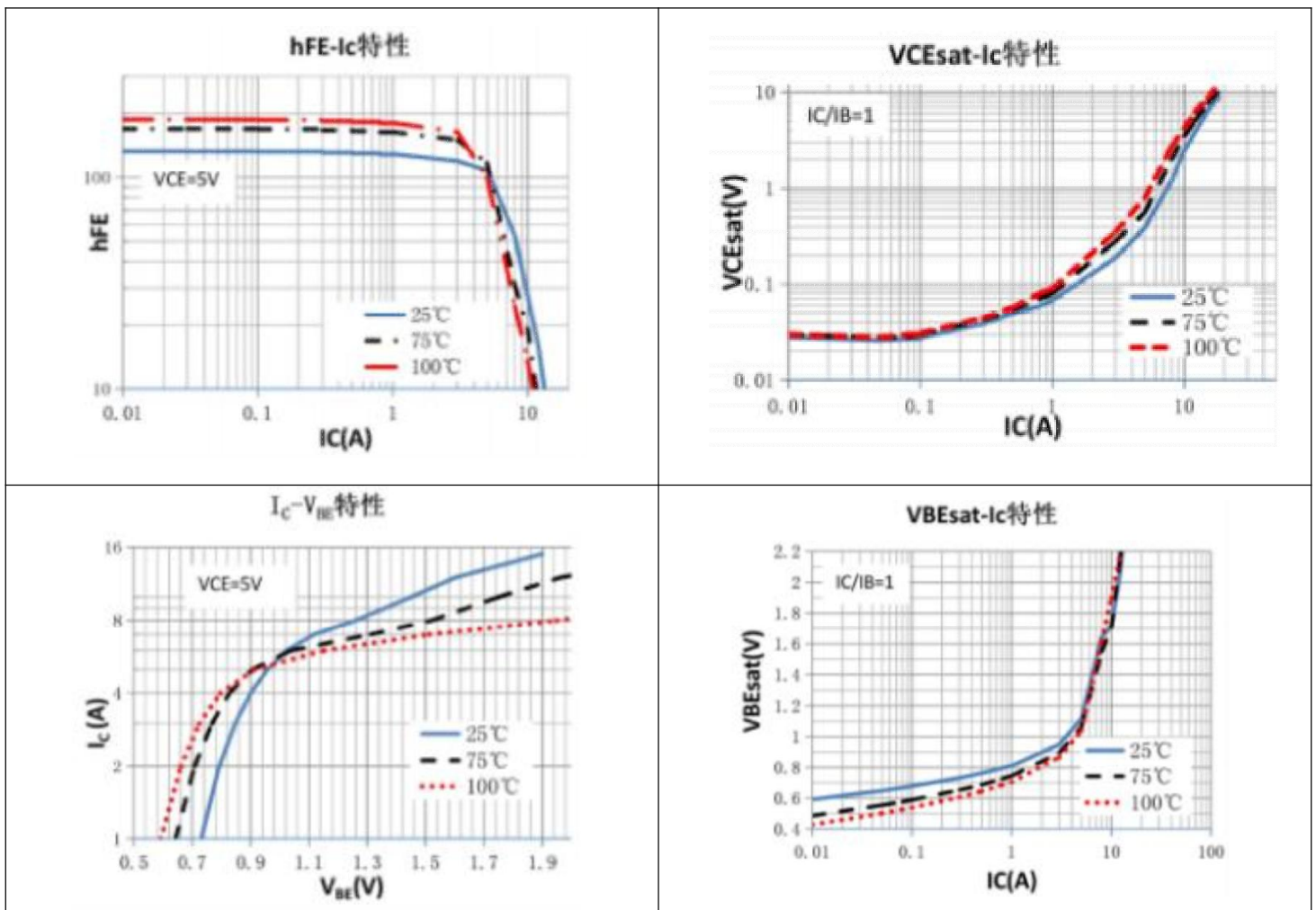
Electrical Characteristics (°C):

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			

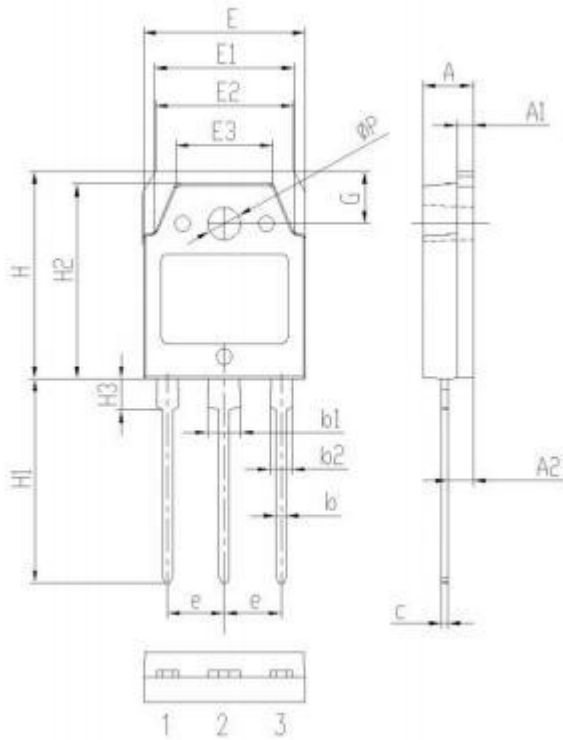
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -8A; I_B = -0.8A$			-3.0	V
Base-emitter voltage	V_{BE}	$V_{CE} = -5V; I_C = -7A$			-1.5	V
Transition frequency	f_T	$V_{CE} = -5V; I_C = -1A$		30		MHz

Symbol	Paramter	Typ	Units
$R_{\theta JC}$	Junction-to-Case	0.35	$^{\circ}C/W$

TYPICAL CHARACTERISTICS



Package Information



Symbol	Dimensions (millimeters)	
	Min.	Max.
A	4.60	5.00
A1	1.30	1.70
A2	2.20	2.60
b	0.80	1.20
b1	2.90	3.30
b2	1.90	2.30
c	0.40	0.80
e	5.25	5.65
E	15.3	15.7
E1	13.2	13.6
E2	13.1	13.5
E3	9.10	9.50
H	19.7	20.1
H1	19.1	20.1
H2	18.3	18.7
H3	2.80	3.20
G	4.80	5.20
ΦP	3.00	3.40

TO-3PB PACKAGE