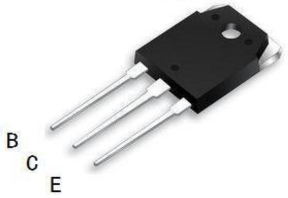
NJW0281G

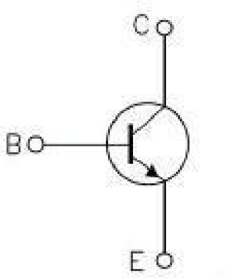
Silicon NPN Triple Diffused Type

①Complementary to NJW0302G
②High collector voltage:VCEO=230V (min)
③Recommended for 100-W high-fidelity audio frequency amplifier Output stage



TO-3P

Note1: 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(Tc=25℃)

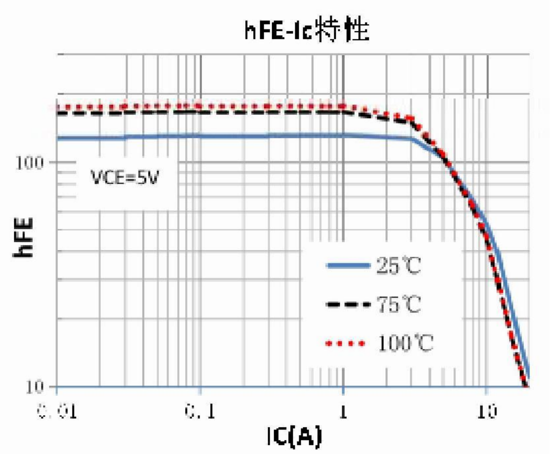
Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	230	V
Collector-emitter voltage	V_{CEO}	230	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	15	A
Bese current	I_B	1.5	A
Collector power dissipation(Tc=25℃)	P_C	150	W
Junction temperature	T_j	150	℃
Storage temperature range	T_{STG}	-55~150	℃

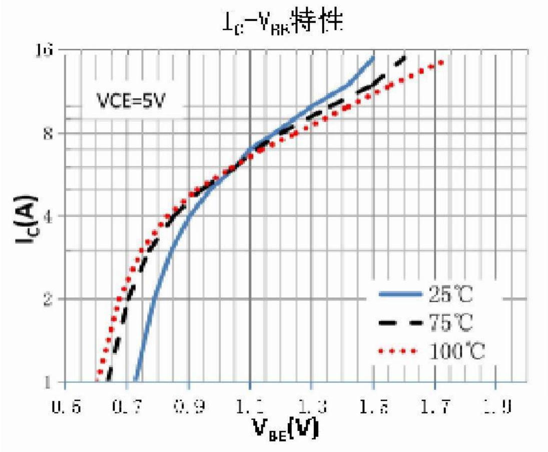
Electrical Characteristics (Tc=25℃)

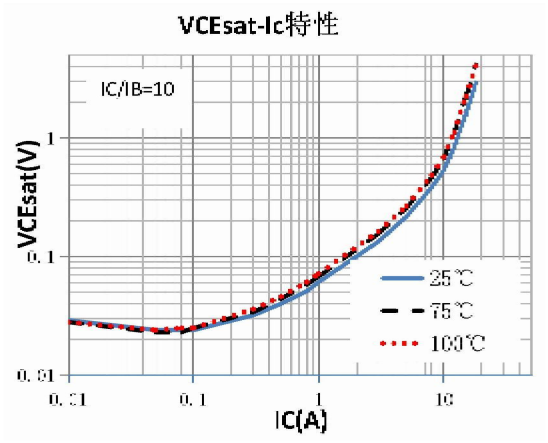
Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB}=230V; I_E=0			10	uA
Emitter cut-off current	I_{EBO}	V_{EB}=5V; I_C=0			10	uA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=50mA,I_B=0	230			V
Dc current gain	h_{FE}	V_{CE}=5V; I_C=1A;	80		160	
	$h_{FE(2)}$	V_{CE}=5V; I_C=7A;	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	
Transition frequency	f_T	V_{CE}=5V; I_C=1A		30		MHz

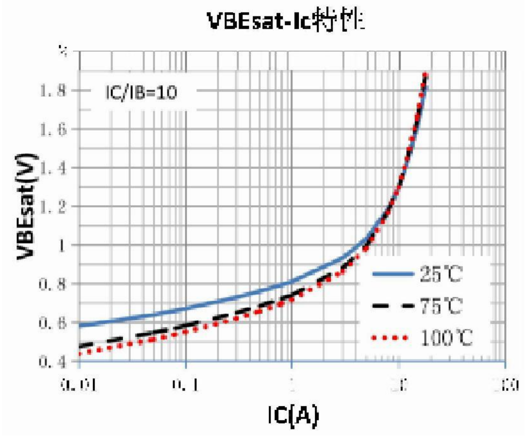
Symbol	Paramter	Typ	Units
$R_{\theta JC}$	Junction-to-Case	0.35	℃/W

TYPICAL CHARACTERISTICS

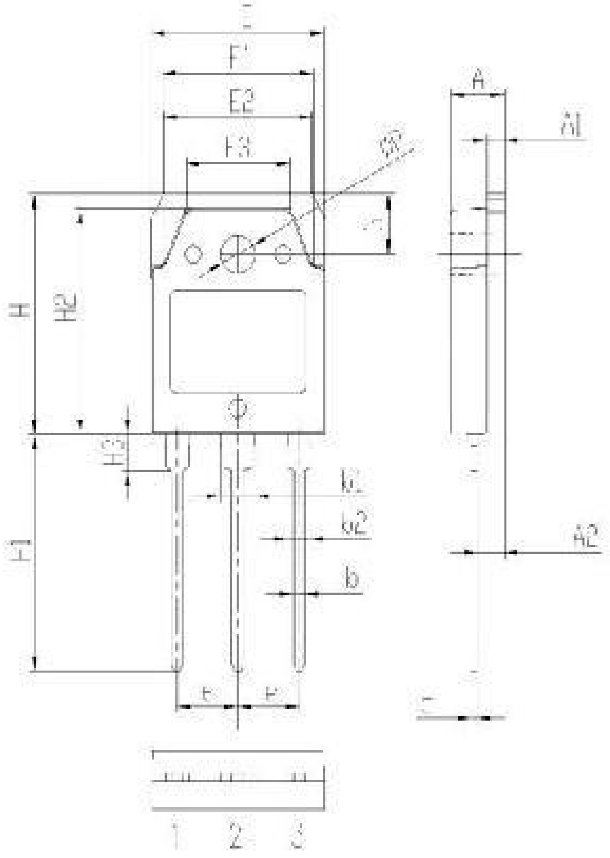








Package Information



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