

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



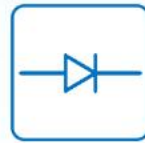
TVS



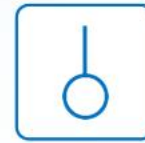
MOS



LDO



Diode



Sensor



DC-DC

## Product Specification

▶ Domestic	Part Number	NJW0281G
▶ Overseas	Part Number	NJW0281G
▶ Equivalent	Part Number	NJW0281G

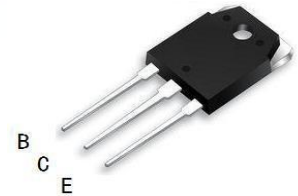
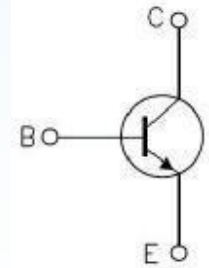
EV is the abbreviation of name EVVO

Silicon NPN transistor

## Power Amplifier Applications

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

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.



TO-3P

## ORDERING INFORMATION

Ordering Codes	Package	Product Code	Packing
NJW0281G	TO-3P	NJW0281G	Tube

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

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( $T_c=25^\circ\text{C}$ )	$P_C$	150	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55~150	$^\circ\text{C}$

## Electrical Characteristics ( $T_c=25^\circ\text{C}$ ):

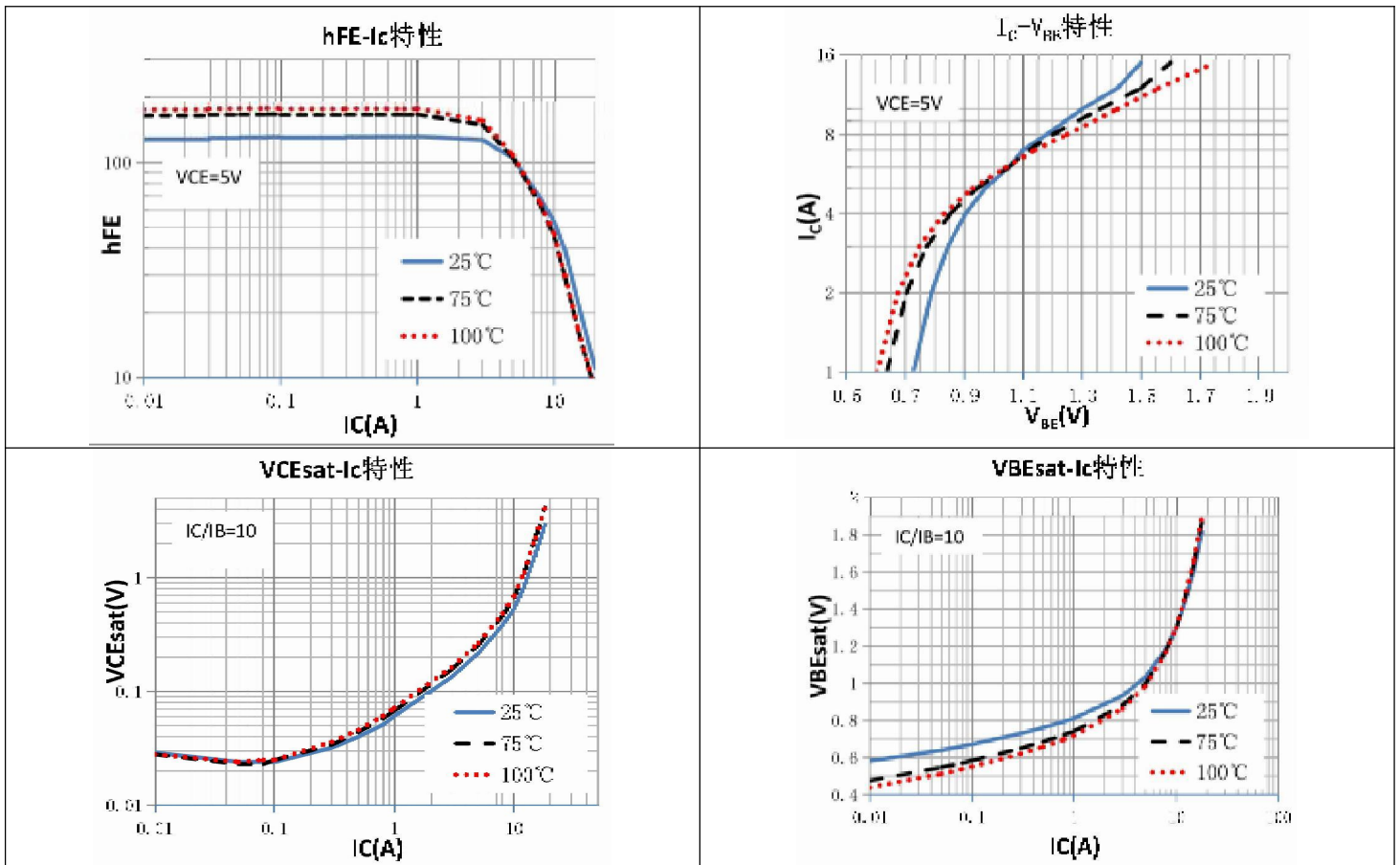
Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB}=230V; I_E=0$			10	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V; I_C=0$			10	$\mu\text{A}$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	230			V
Dc current gain	$h_{FE}$	$V_{CE}=5V; I_C=1A;$	80		160	
	$h_{FE(2)}$	$V_{CE}=5V; I_C=7A;$	35			

Silicon NPN transistor

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

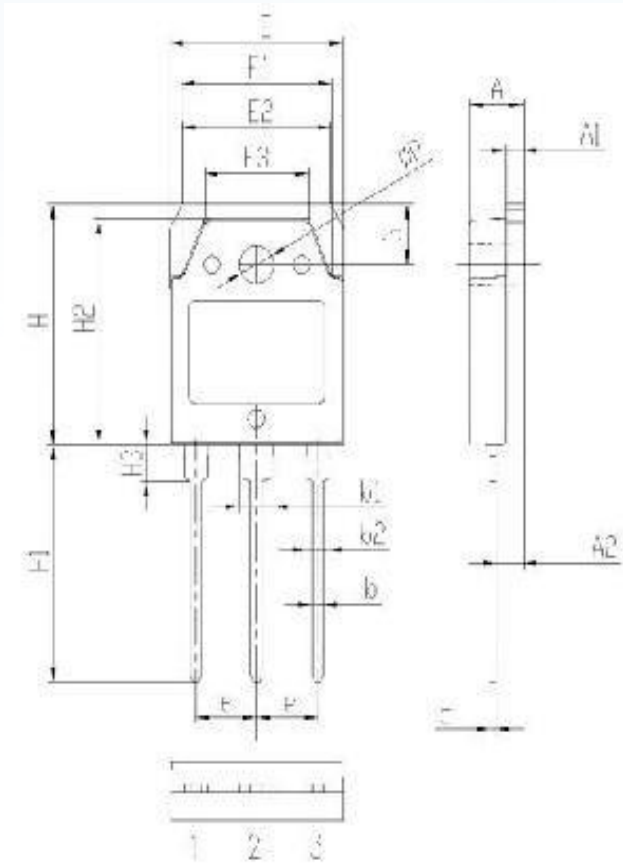
Symbol	Parameter	Typ	Units
$R_{\theta JC}$	Junction-to-Case	0.35	$^{\circ}C/W$

### TYPICAL CHARACTERISTICS



Silicon NPN transistor

**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**



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