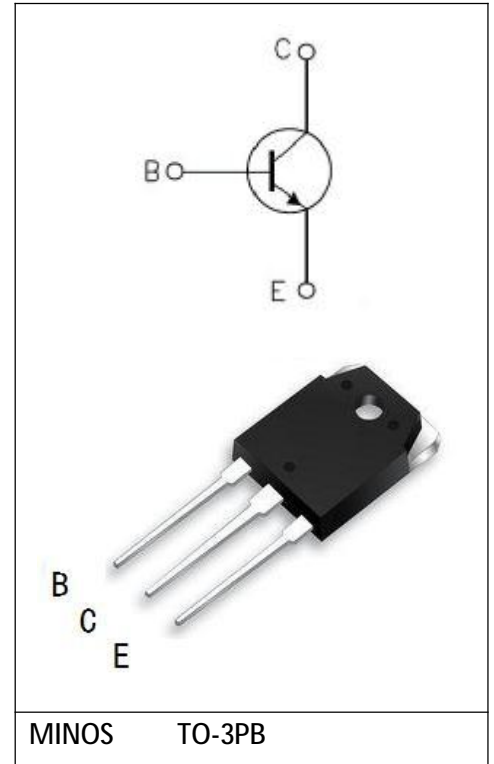


Transistor Silicon NPN Triple Diffused Type  
NJW0281G

Power Amplifier Applications

Complementary to NJW0302G  
High collector voltage:  $V_{CEO}=230V$  (min)  
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.



MINOS TO-3PB

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

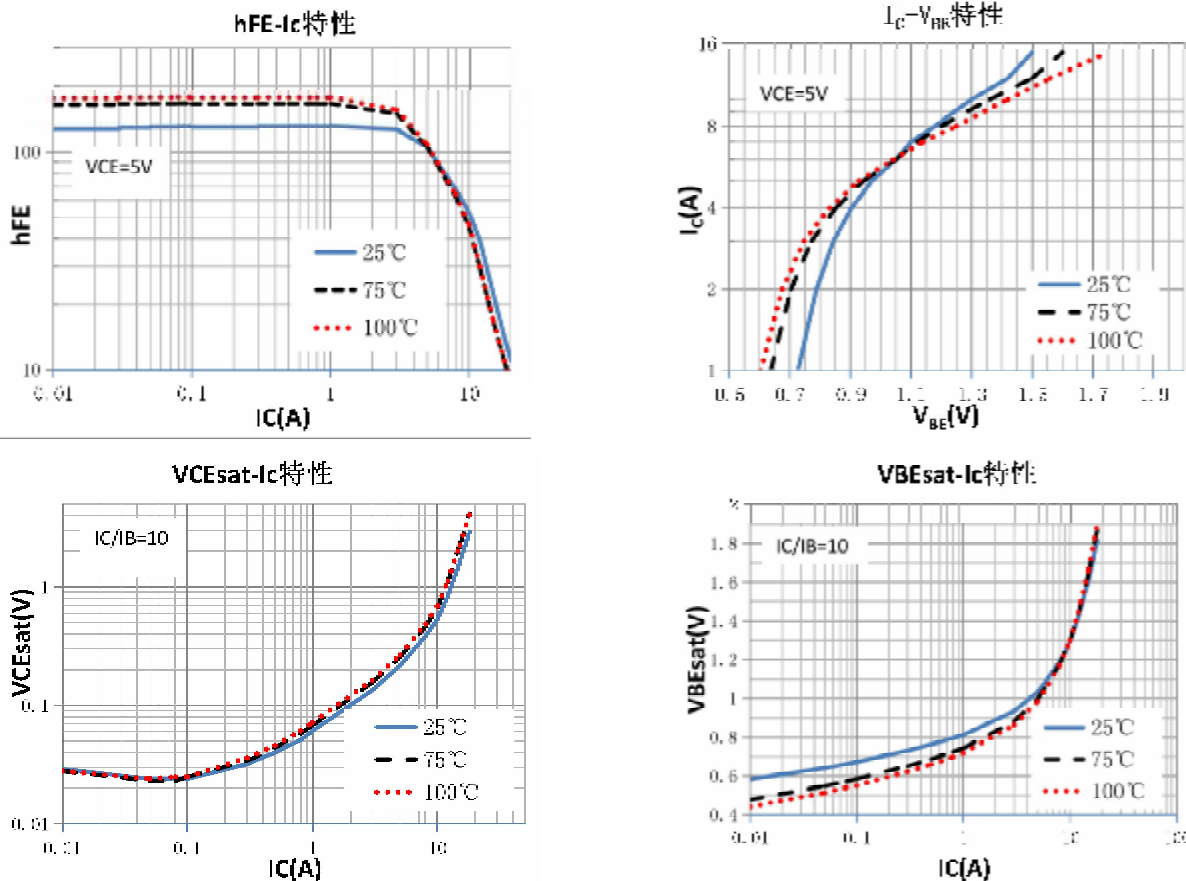
Characteristics	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	230	V
Collector-emitter voltage	$V_{CEO}$	230	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_c$	15	A
Base current	$I_B$	1.5	A
Collector power dissipation( $T_c=25^\circ C$ )	$P_c$	150	W
Junction temperature	$T_j$	150	$^\circ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

Electrical Characteristics (T<sub>c</sub>=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	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V; I <sub>C</sub> =0			10	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>	V <sub>CE</sub> =5V; I <sub>C</sub> =1A;	80		160	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =5V; I <sub>C</sub> =7A;	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	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =5V; I <sub>C</sub> =1A		30		MHz

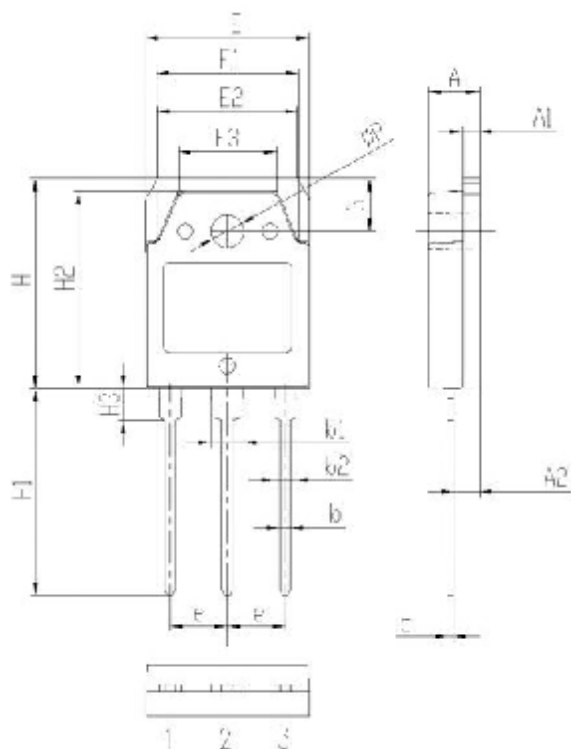
Symbol	Parameter	Typ	Units
R <sub>θJC</sub>	Junction-to-Case	0.35	°C/W

## TYPICAL CHARACTERISTICS



## Package Information

### TO-3PB PACKAGE



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

## Notice

Please note that

Minos electronics co., LTD. Reserves the right to change any product or specification without prior notice. When using the product, be sure to get the latest specifications.

Minos electronics limited assumes no liability whatsoever arising from this application or the products described herein. When using Minos electronics LTD. 's products in your equipment, please take adequate safety measures to prevent the equipment from causing personal injury, fire or other problems in the event of any product failure.

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