

## INCHANGE SEMICONDUCTOR

## **isc Silicon PNP Power Transistors**

## NJW1302G

#### DESCRIPTION

- With TO-3PN packaging
- · Reliable performance at higher powers
- · Accurate reproduction of Input signal
- · Greater dynamic range
- · Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

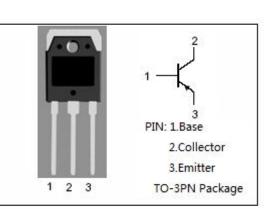
- · Switching regulators
- High frequency inverters
- General purpose power amplifiers

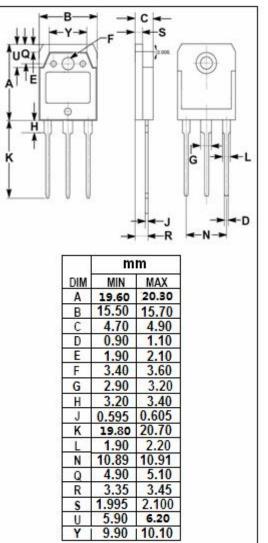
### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
Vсво	Collector-Base Voltage	-250	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-250	v
V <sub>CEX</sub>	Collector-Emitter Voltage V <sub>EB</sub> = 5V	-250	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
lc	Collector Current-Continuous	-15	А
I <sub>CM</sub>	Collector Current-Peak	-30	А
lв	Base Current-Continuous	-1.6	А
Ρτ	Total Power Dissipation @ T <sub>c</sub> =25℃	200	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.63	°C/W







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### **ELECTRICAL CHARACTERISTICS**

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>c</sub> =- 100mA; I <sub>B</sub> = 0	-250			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8A; I <sub>B</sub> =- 0.8A			-0.6	V
$V_{BE(on)}$	Base-Emitter On Voltage	I <sub>C</sub> = -8A;V <sub>CE</sub> = -5V			-1.5	V
I <sub>СВО</sub>	Collector Cutoff Current	V <sub>CB</sub> =- 250V			-50	mA
ICEO	Collector Cutoff Current	V <sub>CE</sub> =- 250V			-50	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =- 5V			-5	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -0.1A; V <sub>CE</sub> =-5V	75		150	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	75		150	
h <sub>FE-3</sub>	DC Current Gain	I <sub>C</sub> = -3A; V <sub>CE</sub> = -5V	75		150	
h <sub>FE-4</sub>	DC Current Gain	I <sub>C</sub> =- 5A; V <sub>CE</sub> = -5V	60			
h <sub>FE-5</sub>	DC Current Gain	I <sub>C</sub> =- 8A; V <sub>CE</sub> = -5V	45			

### **NOTICE:**

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