

isc Silicon PNP Power Transistor
NJW21193G
DESCRIPTION

- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

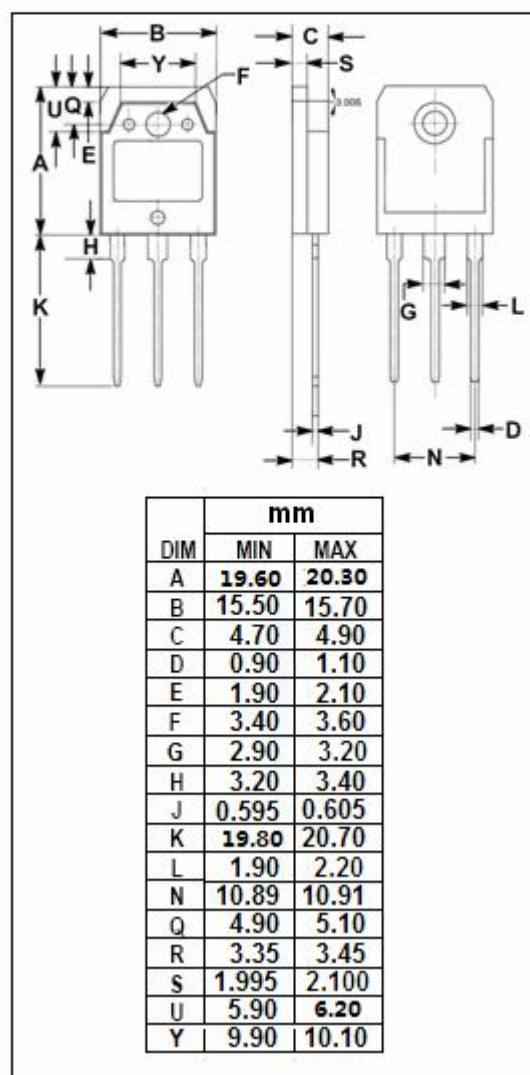
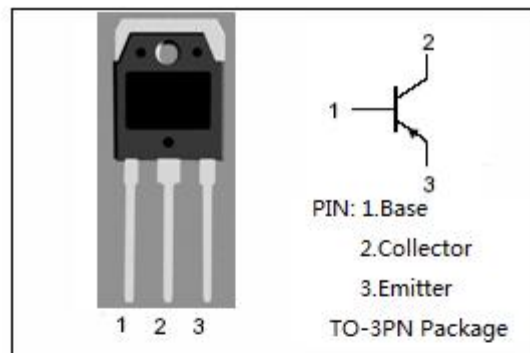
- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-400	V
V_{CEO}	Collector-Emitter Voltage	-250	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-30	A
I_B	Base Current	-5	A
P_C	Collector Power Dissipation@ $T_C=25^{\circ}\text{C}$	200	W
T_J	Junction Temperature	-65~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.625	$^{\circ}\text{C}/\text{W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -30mA; I _B = 0	-250		V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -1mA; I _E = 0	-400		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-5.0		V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = -8A; I _B = -0.8A		-1.4	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = -16A; I _B = -3.2A		-4.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -8A; V _{CE} = -5V		-2.2	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -250V; I _B =0		-0.1	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = -400V; I _E =0		-0.1	mA
h _{FE-1}	DC Current Gain	I _C = -8A; V _{CE} = -5V	20	80	
h _{FE-2}	DC Current Gain	I _C = -16A; V _{CE} = -5V	8		

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