

isc Silicon NPN Power Transistor
NJW21194G
DESCRIPTION

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

APPLICATIONS

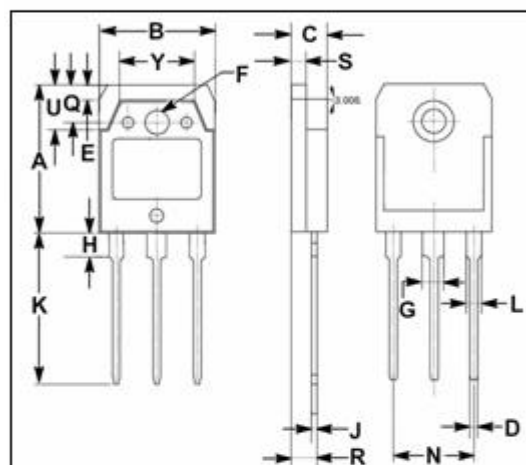
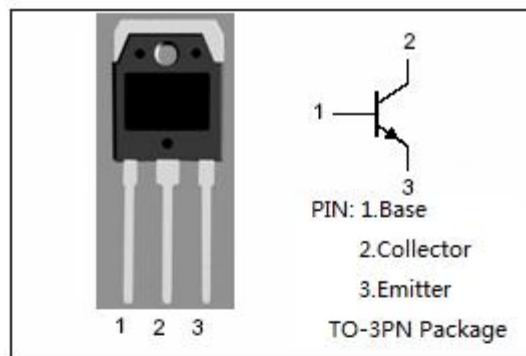
- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°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°C	200	W
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th-j-c}	Thermal Resistance,Junction to Case	0.625	°C/W



DIM	mm	
	MIN	MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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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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