

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

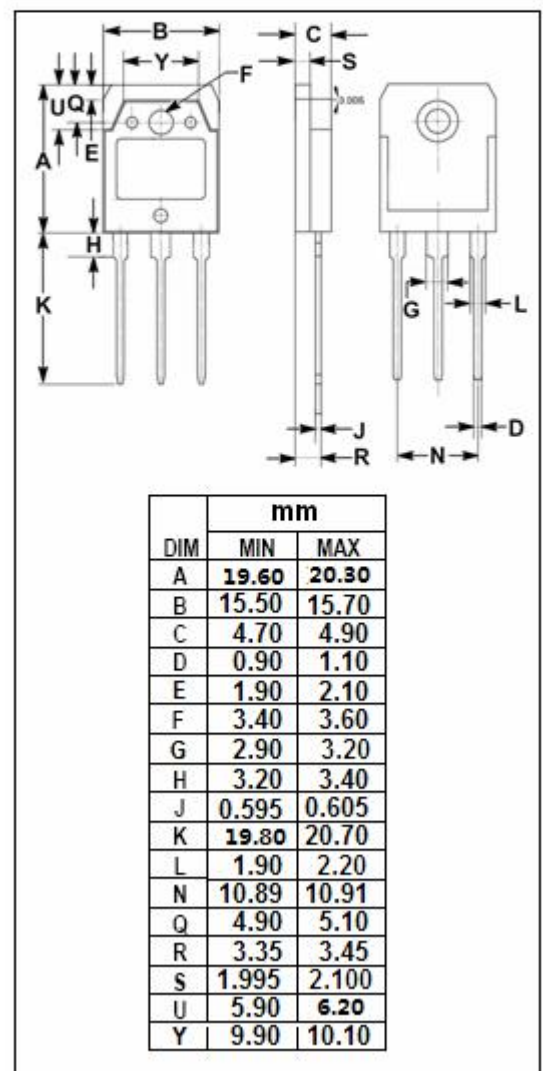
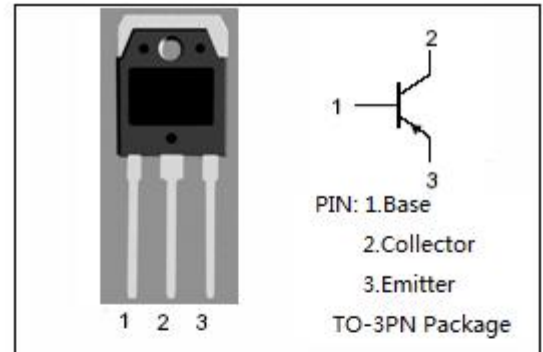
- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°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 |



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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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