

isc N-Channel MOSFET Transistor

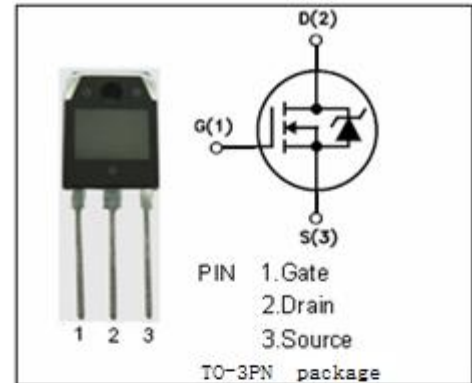
9N80

• DESCRIPTION

- Drain Current $I_D = 9A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 800V(\text{Min})$
- Fast Switching Speed

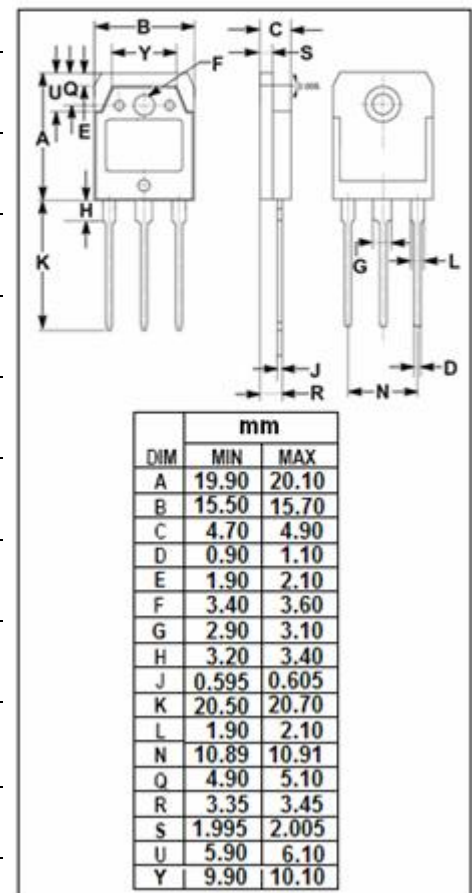
• APPLICATIONS

- General purpose power amplifier



• ABSOLUTE MAXIMUM RATINGS($T_C = 25^\circ C$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|---------------|---|----------|------------|
| V_{DSS} | Drain-Source Voltage ($V_{GS} = 0$) | 800 | V |
| V_{GS} | Gate-Source Voltage | ± 20 | V |
| I_D | Drain Current-continuous @ $T_C = 25^\circ C$ | 9 | A |
| $I_{D(puls)}$ | Pulse Drain Current | 36 | A |
| P_{tot} | Total Dissipation @ $T_C = 25^\circ C$ | 240 | W |
| T_j | Max. Operating Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ C$ |



• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|--------------|--------------------------------------|-----|--------------|
| $R_{th j-c}$ | Thermal Resistance, Junction to Case | 0.7 | $^\circ C/W$ |

isc N-Channel MOSFET Transistor**9N80**• ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYPE | MAX | UNIT |
|---------------|---------------------------------|--------------------------------------|-----|------|-----------|---------------|
| $V_{(BR)DSS}$ | Drain-Source Breakdown Voltage | $V_{GS}=0; I_D=1\text{mA}$ | 800 | | | V |
| $V_{GS(th)}$ | Gate Threshold Voltage | $V_{DS}=V_{GS}; I_D=250\mu\text{A}$ | 2.0 | | 3.5 | V |
| V_{SD} | Diode Forward On-Voltage | $I_S=9\text{A}; V_{GS}=0$ | | | 1.4 | V |
| $R_{DS(on)}$ | Drain-Source On-Resistance | $V_{GS}=10\text{V}; I_D=4.5\text{A}$ | | | 1.3 | Ω |
| I_{GSS} | Gate-Body Leakage Current | $V_{GS}= \pm 20\text{V}; V_{DS}=0$ | | | ± 100 | nA |
| I_{DSS} | Zero Gate Voltage Drain Current | $V_{DS}=800\text{V}; V_{GS}=0$ | | | 10 | μA |