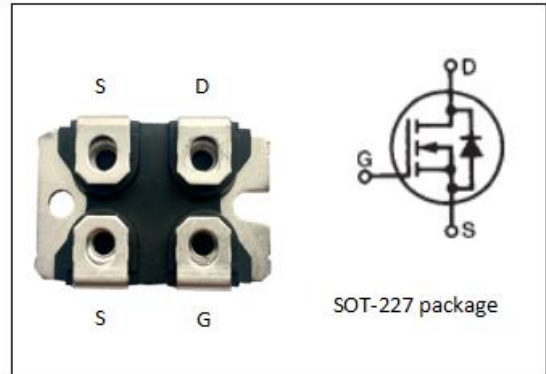


isc N-Channel MOSFET Transistor

IXFN130N30

FEATURES

- Drain Current : $I_D=130A@ T_C=25^\circ C$
- Drain Source Voltage
: $V_{DSS}= 300V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(\text{on})} = 18m\ \Omega (\text{TYP}) @ V_{GS}= 10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



DESCRIPTION

- motor drive, DC-DC converter, power switch and solenoid drive.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--------------------------------------|----------|------------|
| V_{DSS} | Drain-Source Voltage | 300 | V |
| V_{GS} | Gate-Source Voltage | ± 20 | V |
| I_D | Drain Current-Continuous | 130 | A |
| I_{DM} | Drain Current-Single Pulsed | 520 | A |
| P_D | Total Dissipation @ $T_C=25^\circ C$ | 700 | W |
| T_j | Max. Operating Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ C$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|-------------------------------------|------|--------------|
| $R_{th(J-c)}$ | Junction-to-case thermal resistance | 0.18 | $^\circ C/W$ |

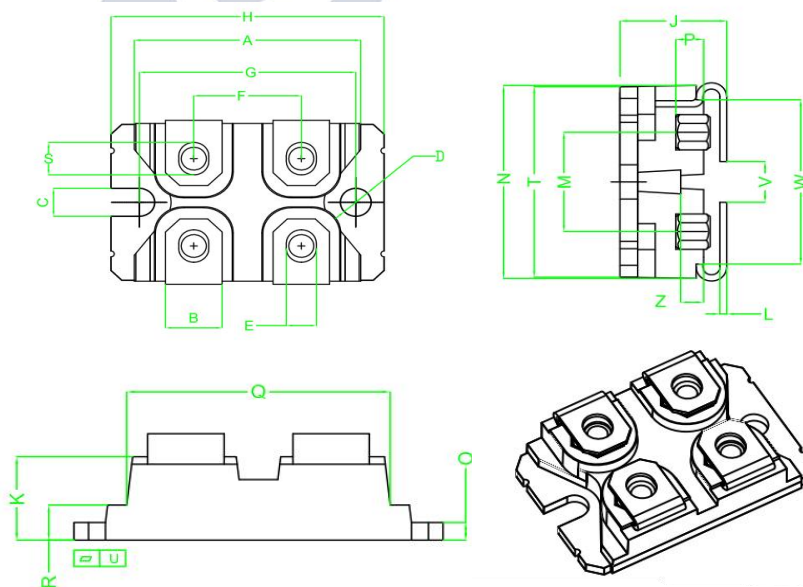
isc N-Channel MOSFET Transistor
IXFN130N30
ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------|--------------------------------|---|-----|-----|------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D =0.25mA | 300 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =0.25mA | 2.0 | | 4.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} =10V; I _D =65A | | 18 | 25 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} =±20V | | | ±200 | nA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 300V; V _{GS} = 0V | | | 100 | μA |
| V _{SD} | Diode forward voltage | I _S = 100A, V _{GS} = 0V | | | 1.2 | V |

PACKAGE OUTLINE

Dimensions in mm



| DIM | Millimeter | |
|-----|------------|-------|
| | min | max |
| A | 31.40 | 31.60 |
| B | 7.70 | 8.10 |
| C | 4.20 | 4.40 |
| D | 4.20 | 4.40 |
| E | 4.10 | 4.40 |
| F | 14.90 | 15.10 |
| G | 30.10 | 30.30 |
| H | 38.00 | 38.40 |
| J | 12.00 | 12.60 |
| K | 9.35 | 9.65 |
| L | 0.74 | 0.84 |
| M | 12.30 | 12.70 |
| N | 24.40 | 25.00 |
| O | 1.90 | 2.10 |
| P | 2.92 | 3.32 |
| Q | 26.60 | 27.00 |
| R | 3.80 | 4.20 |
| S | 4.95 | 5.45 |
| T | 23.70 | 24.30 |
| U | 0 | 0.10 |
| V | 3.50 | 5.50 |
| W | 20.15 | 20.45 |
| Z | 2.50 | 2.70 |

isc N-Channel MOSFET Transistor**IXFN130N30**

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