# SKJ10N80B

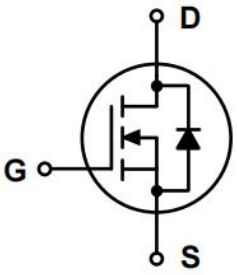
## N-Channel Multi-EPI Super-J MOSFET

| $BV_{DSS}$,$T_A$=25℃ | $I_D$,$T_A$=25℃ | $R_{DS(on)}$,typ@10V |
|---|---|---|
| 800 V | 10A | 410mΩ |

## Features

- $BV_{DSS}$ ≧ 800V
- $I_D$ = 10A
- $R_{DS(ON)}$ ≦ 500mΩ@$V_{GS}$=10V

TO-252




## Application

- Power switching application
- Hard Switched and High Frequency Circuits
- Uninterruptible Power Supply

## Description

- Proprietary New Planar Technology
- High Reliability Capability

## Absolute Maximum Ratings($T_C$=25℃,unless otherwise noted.)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Drain-source Voltage | $V_{DS}$ | 800 | V |
| Gate-source Voltage | $V_{GS}$ | ±30 | V |
| Drain Current-Continuous | $I_D$ | 10 | A |
| Operating Junction Temperature Range | $T_J$ | -55~150 | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55~150 | ℃ |

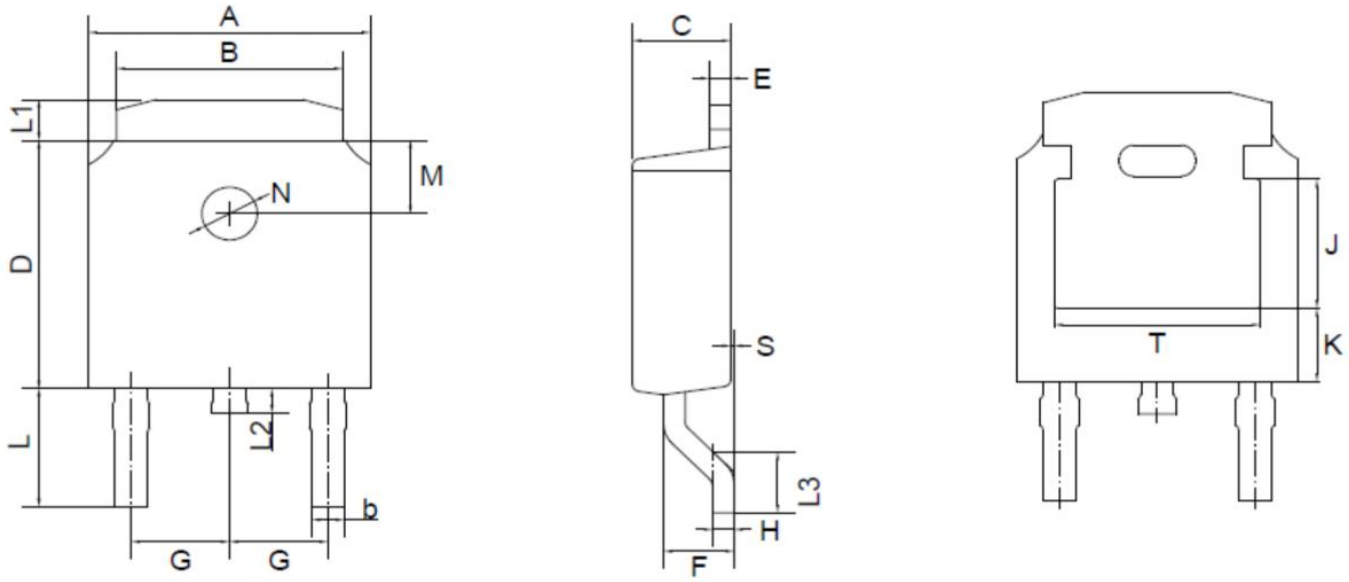
## Electrical Characteristics($T_J$=25℃,unless otherwise noted.)

| Parameter | Symbol | Condition | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Drain-source Breakdown voltage | $BV_{DSS}$ | $V_{GS}$=0V, $I_D$=250μA | 800 | | | V |
| Gate Voltage Drain Current | $I_{DSS}$ | $V_{DS}$=800V, $V_{GS}$=0V | | | 1 | μA |
| Gate-source leakage current | $I_{GSS}$ | $V_{GS}$=±30V, $V_{DS}$=0V | | | ±100 | nA |
| Gate Threshold voltage | $V_{GS(th)}$ | $V_{DS}$=$V_{GS}$, $I_D$=250μA | 2.5 | 3.5 | 4.5 | V |
| Static Drain to Source on resistance | $R_{DS(on)}$ | $V_{GS}$= 10V, $I_D$= 5A | | 410 | 500 | mΩ |
| Drain-Source Diode Forward Voltage | $V_{SD}$ | $V_{GS}$=0V, $I_{SD}$=10A | | | 1.4 | V |

## Package Information

## TO-252

## Dimensions in mm




TO-252(D-PAK) mechanical data

| UNIT | | A | B | b | C | D | E | F | G | H | L | L1 | L2 | L3 | S | M | N | J | K | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | max | 6.7 | 5.5 | 0.8 | 2.5 | 6.3 | 0.6 | 1.8 | 2.29 TYPICAL | 0.55 | 3.1 | 1.2 | 1.0 | 1.75 | 0.1 | 1.8 TYPICAL | 1.3 TYPICAL | 3.16 ref. | 1.80 ref. | 4.83 ref. |
| | min | 6.3 | 5.1 | 0.3 | 2.1 | 5.9 | 0.4 | 1.3 | | 0.45 | 2.7 | 0.8 | 0.6 | 1.40 | 0.0 | | | | | |
| mil | max | 264 | 217 | 31 | 98 | 248 | 24 | 71 | 90 TYPICAL | 22 | 122 | 47 | 39 | 69 | 4 | 71 TYPICAL | 51 TYPICAL | 124 ref. | 71 ref. | 190 ref. |
| | min | 248 | 201 | 12 | 83 | 232 | 16 | 51 | | 18 | 106 | 31 | 24 | 55 | 0 | | | | | |