

2SK1181

External dimensions 2 FM100

Absolute Maximum Ratings (Ta = 25°C)

| Symbol | Ratings | Unit |
|------------------------|-------------------------------|------|
| V _{DSS} | 500 | V |
| V _{GSS} | ±20 | V |
| I _D | ±13 | A |
| I _D (pulse) | ±52 (T _{ch} ≤ 150°C) | A |
| P _D | 85 (T _c = 25°C) | W |
| E _{AS} * | 660 | mJ |
| T _{ch} | 150 | °C |
| T _{stg} | -55 to +150 | °C |

*: V_{DD} = 50V, L = 7mH, I_L = 13A, unclamped, See Figure 1 on Page 5.

Electrical Characteristics (Ta = 25°C)

| Symbol | Ratings | | | Unit | Conditions |
|-----------------------|---------|------|------|------|---|
| | min | typ | max | | |
| V _{(BR) DSS} | 500 | | | V | I _D = 250μA, V _{GS} = 0V |
| I _{GSS} | | | ±500 | nA | V _{GS} = ±20V |
| I _{bSS} | | | 250 | μA | V _{DS} = 500V, V _{GS} = 0V |
| V _{TH} | 2.0 | | 4.0 | V | V _{DS} = 10V, I _D = 250μA |
| R _e (yfs) | 8.5 | 13 | | S | V _{DS} = 10V, I _D = 6.5A |
| R _{DS (on)} | | 0.35 | 0.4 | Ω | V _{GS} = 10V, I _D = 6.5A |
| C _{iss} | | 2700 | | pF | V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V |
| C _{oss} | | 350 | | pF | V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V |
| t _{on} | | 65 | | ns | I _D = 6.5A, V _{DD} = 250V, V _{GS} = 10V, See Figure 2 on Page 5. |
| t _{off} | | 180 | | ns | I _D = 6.5A, V _{DD} = 250V, V _{GS} = 10V, See Figure 2 on Page 5. |

