

2SK2709

External dimensions 2 FM100

Absolute Maximum Ratings (Ta = 25°C)

| Symbol | Ratings | Unit |
|---------------------------|----------------------------|------|
| V _{DSS} | 600 | V |
| V _{GSS} | ±30 | V |
| I _D | ±8.5 | A |
| I _D (pulse) *1 | ±34 | A |
| P _D | 85 (T _c = 25°C) | W |
| E _{AS} *2 | 300 | mJ |
| I _{AS} | 8.5 | A |
| T _{ch} | 150 | °C |
| T _{stg} | -55 to +150 | °C |

*1: P_w ≤ 100μs, duty cycle ≤ 1%

*2: V_{DD} = 30V, L = 8mH, I_L = 8.5A, unclamped, R_G = 50Ω,
See Figure 1 on Page 5.

Electrical Characteristics (Ta = 25°C)

| Symbol | Ratings | | | Unit | Conditions |
|-----------------------|---------|------|------|------|---|
| | min | typ | max | | |
| V _(BR) DSS | 600 | | | V | I _D = 100μA, V _{GS} = 0V |
| I _{GSS} | | | ±100 | nA | V _{GS} = ±30V |
| I _{DSS} | | | 100 | μA | V _{DS} = 600V, V _{GS} = 0V |
| V _{TH} | 2.0 | 3.0 | 4.0 | V | V _{DS} = 10V, I _D = 1mA |
| Re (yfs) | 5.0 | 7.0 | | S | V _{DS} = 20V, I _D = 4A |
| R _{DS} (on) | | 0.65 | 0.85 | Ω | V _{GS} = 10V, I _D = 4A |
| C _{iss} | | 1200 | | pF | V _{DS} = 10V, f = 1.0MHz, V _{GS} = 0V |
| C _{oss} | | 270 | | pF | |
| C _{rss} | | 150 | | pF | |
| t _d (on) | | 30 | | ns | I _D = 4A, V _{DD} = 250V, R _L = 62.5Ω, V _{GS} = 10V, See Figure 2 on Page 5. |
| t _r | | 40 | | ns | |
| t _d (off) | | 110 | | ns | |
| t _f | | 65 | | ns | |
| V _{SD} | | 0.95 | 1.5 | V | I _{SD} = 8.5A, V _{GS} = 0V |