

2SK1180

External dimensions 2 FM100

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V _{DSS}	500	V
V _{GSS}	±20	V
I _D	±10	A
I _D (pulse)	±40 (T _{ch} ≤ 150°C)	A
P _D	85 (T _c = 25°C)	W
E _{AS} *	500	mJ
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*: V_{DD} = 50V, L = 9mH, I_L = 10A, 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 _{DSS}			250	μA	V _{DS} = 500V, V _{GS} = 0V
V _{TH}	2.0		4.0	V	V _{DS} = 10V, I _D = 250μA
Re (yfs)	6.1	9.2		S	V _{DS} = 10V, I _D = 5.0A
R _{DS (on)}		0.5	0.6	Ω	V _{GS} = 10V, I _D = 5.0A
C _{iss}		1800		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		250		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
t _{on}		60		ns	I _D = 5A, V _{DD} = 250V, V _{GS} = 10V, See Figure 2 on Page 5.
t _{off}		140		ns	I _D = 5A, V _{DD} = 250V, V _{GS} = 10V, See Figure 2 on Page 5.

