

2SK1187

External dimensions 1 FM20

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V _{DSS}	100	V
V _{GSS}	±20	V
I _D	±12	A
I _D (pulse)	±48 (T _{ch} ≤ 150°C)	A
P _D	35 (T _c = 25°C)	W
E _{AS} *	58	mJ
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*: V_{DD} = 25V, L = 600μH, I_L = 12A, unclamped, See Figure 1 on Page 5.

Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V _(BR) DSS	100			V	I _D = 250μA, V _{GS} = 0V
I _{GSS}			±500	nA	V _{GS} = ±20V
I _{DSS}			250	μA	V _{DS} = 100V, V _{GS} = 0V
V _{TH}	2.0		4.0	V	V _{DS} = 10V, I _D = 250μA
Re (yfs)	4.4	6.5		S	V _{DS} = 10V, I _D = 6.0A
R _{DS} (on)		0.12	0.16	Ω	V _{GS} = 10V, I _D = 6.0A
C _{iss}		650		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		240		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
t _{on}		70		ns	I _D = 6A, V _{DD} = 50V, V _{GS} = 10V, See Figure 2 on Page 5.
t _{off}		55		ns	

