

2SK2805

External dimensions 2 FM100

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V _{DSS}	450	V
V _{GSS}	±30	V
I _D	±15	A
I _D (pulse) *1	±60	A
P _D	80 (T _c = 25°C)	W
E _{AS} *2	550	mJ
I _{AS}	15	A
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*1: P_w ≤ 100μs, duty cycle ≤ 1%

*2: V_{DD} = 30V, L = 4.6mH, I_L = 15A, 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	450			V	I _D = 100μA, V _{GS} = 0V
I _{GSS}			±100	nA	V _{GS} = ±30V
I _{DSS}			100	μA	V _{DS} = 450V, V _{GS} = 0V
V _{TH}	2.0	3.0	4.0	V	V _{DS} = 10V, I _D = 1mA
Re (yfs)	8.0	11.5		S	V _{DS} = 20V, I _D = 7.5A
R _{DS} (on)		0.30	0.38	Ω	V _{GS} = 10V, I _D = 7.5A
C _{iss}		2100		pF	V _{DS} = 10V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		430		pF	
C _{rss}		210		pF	
t _d (on)		35		ns	I _D = 7.5A, V _{DD} = 200V, R _L = 26.7Ω, V _{GS} = 10V, See Figure 2 on Page 5.
t _r		45		ns	
t _d (off)		130		ns	
t _f		60		ns	
V _{SD}		0.95	1.4	V	I _{SD} = 15A, V _{GS} = 0V