

2SK3200

External dimensions 1 FM20

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V _{DSS}	500	V
V _{GSS}	±30	V
I _D	±10	A
I _D (pulse) *1	±40	A
P _D	35 (Tc = 25°C)	W
EAS *2	50	mJ
I _{AS}	10	A
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*1: P_w ≤ 100μs, duty cycle ≤ 1%

*2: V_{DD} = 30V, L = 940μH, I_L = 10A, 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}	500			V	I _D = 100μA, V _{GS} = 0V
I _{GSS}			±100	nA	V _{GS} = ±30V
I _{DSS}			100	μA	V _{DS} = 500V, V _{GS} = 0V
V _{TH}	2.0	3.0	4.0	V	V _{DS} = 10V, I _D = 1mA
Re _(yfs)	5.0	9.0		S	V _{DS} = 20V, I _D = 5A
R _{DS(on)}		0.85	1.1	Ω	V _{GS} = 10V, I _D = 5A
C _{iss}		920		pF	V _{DS} = 10V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		390		pF	
C _{rss}		190		pF	
t _{d(on)}		25		ns	I _D = 5A, V _{DD} ≐ 250V, R _L = 50Ω, V _{GS} = 10V, See Figure 2 on Page 5.
t _r		35		ns	
t _{d(off)}		75		ns	
t _f		55		ns	
V _{SD}		1.1	1.5	V	I _{SD} = 10A, V _{GS} = 0V
t _{rr}		80		ns	I _{SD} = 5A, V _{GS} = 0V, di/dt = 100A/μs