

2SK3332

External dimensions 1 FM20

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V _{DSS}	150	V
V _{GSS}	+20, -10	V
I _D	±12	A
I _D (pulse) *1	±48	A
P _D	30 (T _c = 25°C)	W
EAS *2	100	mJ
I _{AS}	12	A
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

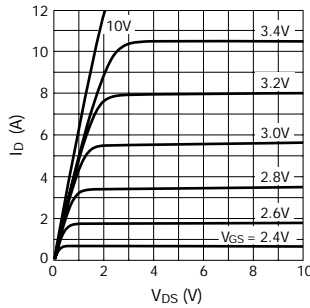
* 1: P_w ≤ 100μs, duty cycle ≤ 1%

* 2: V_{DD} = 25V, L = 1.2mH, I_L = 12A, unclamped, R_G = 50Ω, See Figure 1 on Page 5.

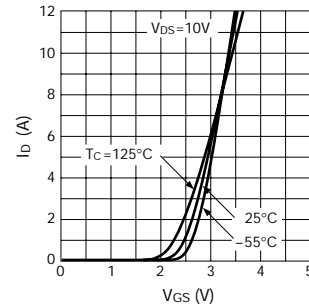
Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V _{(BR)DSS}	150			V	I _D = 100μA, V _{GS} = 0V
I _{GSS}			±100	nA	V _{DS} = +20V, -10V
I _{DSS}			100	μA	V _{DS} = 150V, V _{GS} = 0V
V _{TH}	1.0		2.0	V	V _{DS} = 10V, I _D = 250μA
Re (yfs)	6	11		S	V _{DS} = 10V, I _D = 6A
R _{DS(on)}		150	200	mΩ	V _{GS} = 10V, I _D = 6A
		170	230		V _{GS} = 4V, I _D = 6A
C _{iss}		870		pF	V _{DS} = 10V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		320		pF	
C _{rss}		210		pF	
t _{d(on)}		20		ns	I _D = 6A, V _{DD} ≐ 70V, R _L = 12Ω, V _{GS} = 10V, See Figure 2 on Page 5.
t _r		50		ns	
t _{d(off)}		85		ns	
t _f		40		ns	
V _{SD}		1.0	1.5	V	
t _{rr}		500		ns	I _{SD} = ±100mA

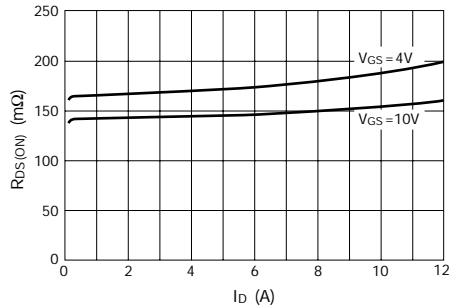
I_D - V_{DS} Characteristics (typical)



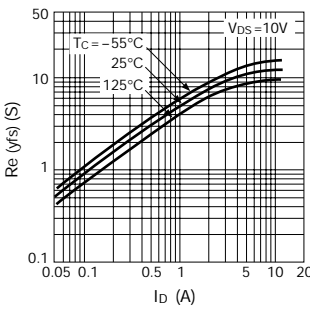
I_D - V_{GS} Characteristics (typical)



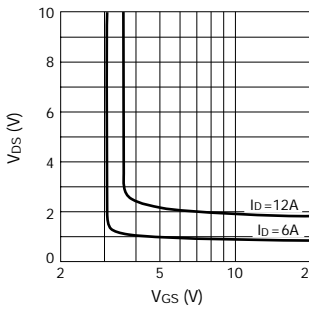
R_{DS(on)} - I_D Characteristics (typical)



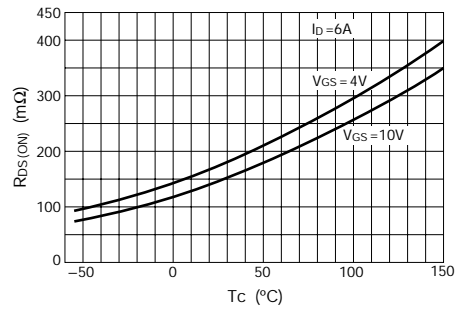
Re (yfs) - I_D Characteristics (typical)



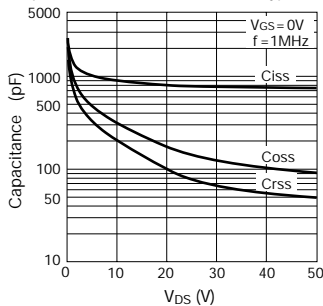
V_{DS} - V_{GS} Characteristics (typical)



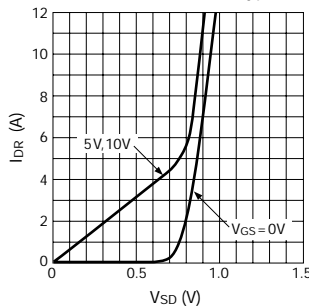
R_{DS(on)} - T_c Characteristics (typical)



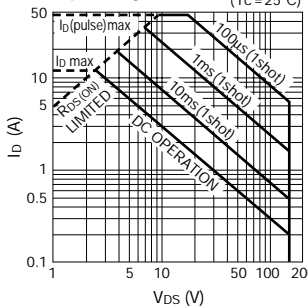
Capacitance - V_{DS} Characteristics (typical)



I_{DR} - V_{SD} Characteristics (typical)



Safe Operating Area



P_D - Ta Characteristics

