

2SK1181

External dimensions 2 FM100

Absolute Maximum Ratings (Ta = 25°C)

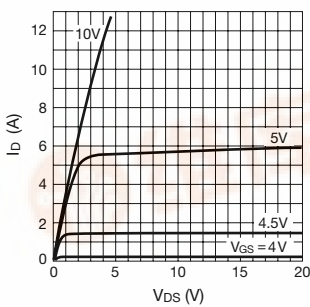
Symbol	Ratings	Unit
V _{DSS}	500	V
V _{GSS}	±20	V
I _D	±13	A
I _D (pulse)	±52 (T _{ch} ≤ 150°C)	A
P _D	85 (T _c = 25°C)	W
EAS*	660	mJ
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*: V_{DD} = 50V, L = 7mH, I_L = 13A, unclamped, See Figure 1 on Page 5.

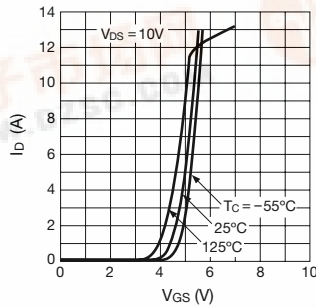
Electrical Characteristics (Ta = 25°C)

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)	8.5	13		S	V _{DS} = 10V, I _D = 6.5A
R _{DS(on)}		0.35	0.4	Ω	V _{GS} = 10V, I _D = 6.5A
C _{iss}		2700		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		350		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
t _{on}		65		ns	I _D = 6.5A, V _{DD} = 250V, V _{GS} = 10V, See Figure 2 on Page 5.
t _{off}		180		ns	I _D = 6.5A, V _{DD} = 250V, V _{GS} = 10V, See Figure 2 on Page 5.

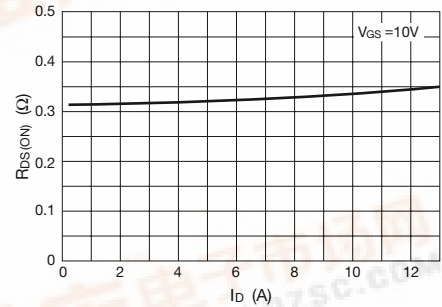
V_{DS} — I_D Characteristics



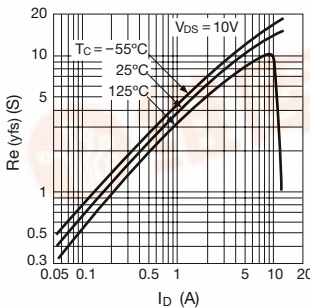
V_{GS} — I_D Characteristics



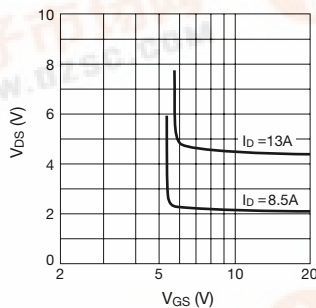
I_D — R_{DS(on)} Characteristics



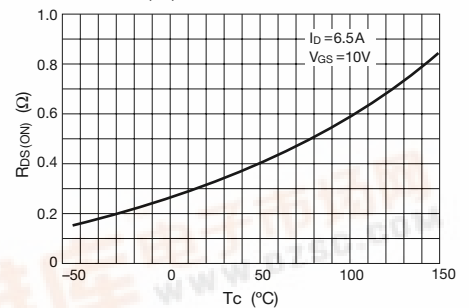
I_D — Re (yfs) Characteristics



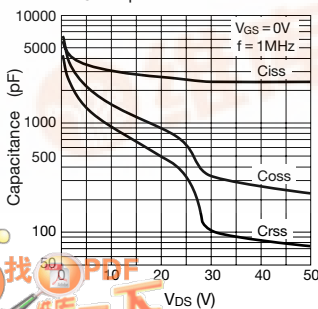
V_{GS} — V_{DS} Characteristics



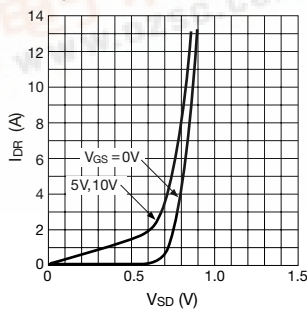
T_c — R_{DS(on)} Characteristics



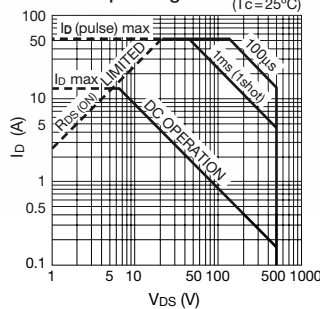
V_{DS} — Capacitance Characteristics



V_{SD} — I_{DR} Characteristics



Safe Operating Area (T_c = 25°C)



T_a — P_D Characteristics

