

2SK1191

External dimensions 1 FM20

Absolute Maximum Ratings (Ta = 25°C)

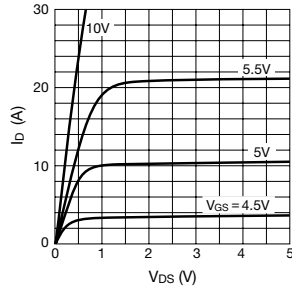
Symbol	Rated	Unit
V _{DSS}	60	V
V _{GSS}	±20	V
I _D	±30	A
I _D (pulse)	±120 (T _{ch} ≤ 150°C)	A
P _D	40 (T _c = 25°C)	W
E _{AS} *	38	mJ
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*: V_{DD} = 25V, L = 50μH, I_L = 30A, unclamped, See Figure 1 on Page 5.

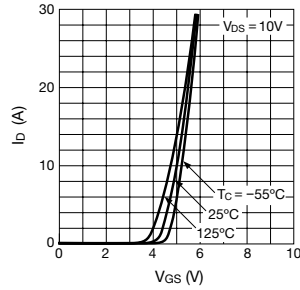
Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V _(BR) DSS	60			V	I _D = 250μA, V _{GS} = 0V
I _{GSS}			±500	nA	V _{GS} = ±20V
I _{DSS}			250	μA	V _{DS} = 60V, V _{GS} = 0V
V _{TH}	2.0		4.0	V	V _{DS} = 10V, I _D = 250μA
Re (yfs)	13	20		S	V _{DS} = 10V, I _D = 15A
R _{DS} (on)		0.021	0.028	Ω	V _{GS} = 10V, I _D = 15A
C _{iss}		2500		pF	V _{DS} = 25V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		1200		pF	
t _{on}		180		ns	I _D = 15A, V _{DD} = 30V, V _{GS} = 10V, See Figure 2 on Page 5.
t _{off}		120		ns	

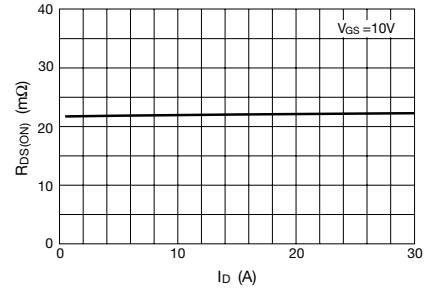
V_{DS} — I_D Characteristics



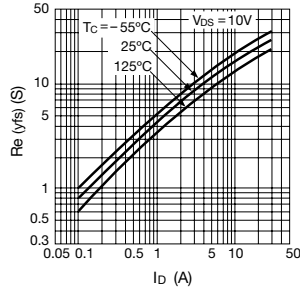
V_{GS} — I_D Characteristics



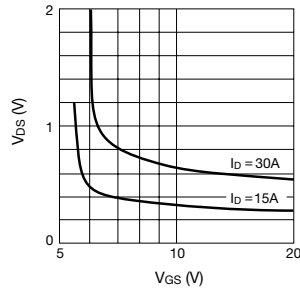
I_D — R_{DS} (ON) Characteristics



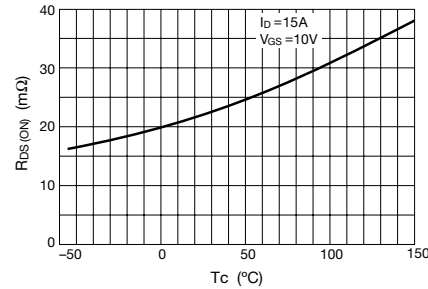
I_D — Re (yfs) Characteristics



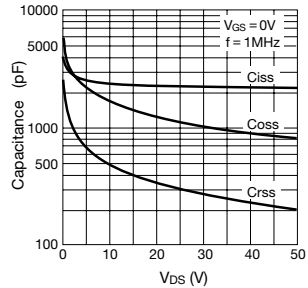
V_{GS} — V_{DS} Characteristics



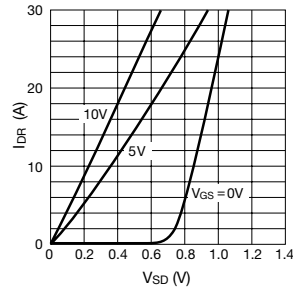
T_c — R_{DS} (ON) Characteristics



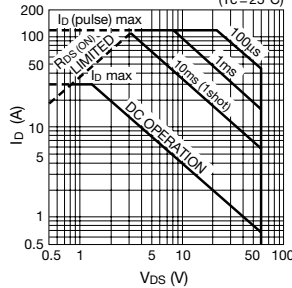
V_{DS} — Capacitance Characteristics



V_{SD} — I_{DR} Characteristics



Safe Operating Area (T_c = 25°C)



T_a — P_D Characteristics

