

MOS FET FKV560

Absolute Maximum Ratings (Ta=25°C)

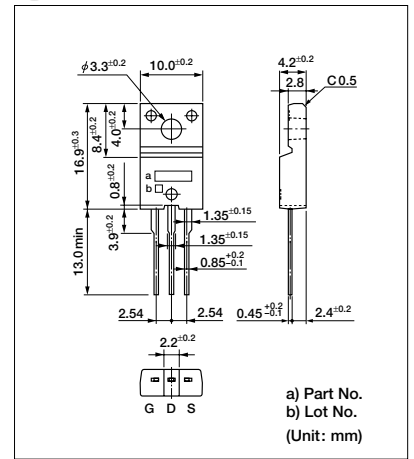
Symbol	Ratings	Unit
V _{DSS}	50	V
V _{GSS}	+20, -10	V
I _D	±60	A
I _{D (pulse)*}	±180	A
P _D	35 (T _c =25°C)	W
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

* P_w ≤ 100μs, duty ≤ 1%

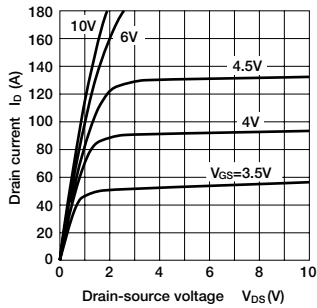
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
V _{(BR) DSS}	I _D = 100μA, V _{GS} = 0V	50			V
I _{GSS}	V _{GS} = +20V			+10	μA
	V _{GS} = -10V			-5	μA
I _{DSS}	V _{DS} = 50V, V _{GS} = 0V			100	μA
V _{TH}	V _{DS} = 10V, I _D = 250μA	1.0		2.5	V
Re (yfs)	V _{DS} = 10V, I _D = 25A	20			S
R _{DS (ON)}	V _{GS} = 10V, I _D = 25A		9	11	mΩ
C _{iss}	V _{DS} = 10V		2700		pF
C _{oss}	f = 1.0MHz		1100		pF
C _{rss}	V _{GS} = 0V		500		pF
t _{d (on)}	I _D = 25A		20		ns
t _r	V _{DD} = 12V		600		ns
t _{d (off)}	R _L = 0.48Ω		300		ns
t _f	V _{GS} = 10V		100		ns
V _{SD}	I _{SD} = 50A, V _{GS} = 0V	1.0		1.5	V
D _i , t _{rr}	I _F = 25A, di/dt = 100A/μs		110		ns

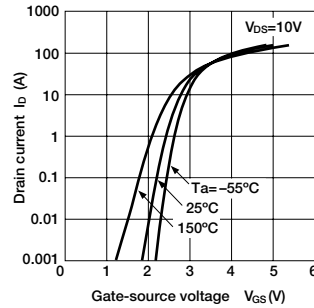
External Dimensions TO220F (full-mold)



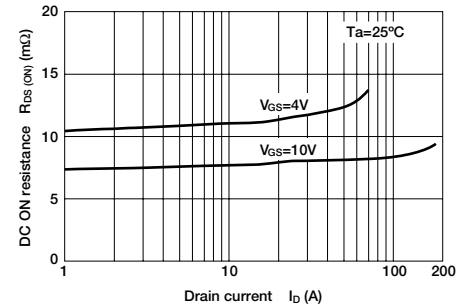
I_D—V_{DS} Characteristics



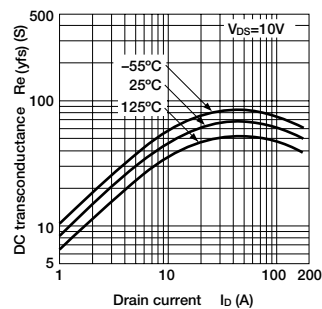
I_D—V_{GS} Characteristics



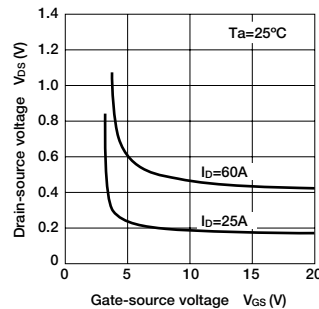
R_{DS (ON)}—I_D Characteristics



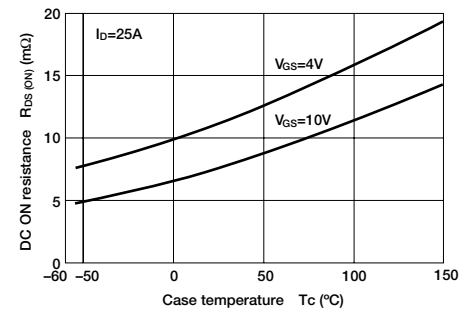
Re (yfs)—I_D Characteristics



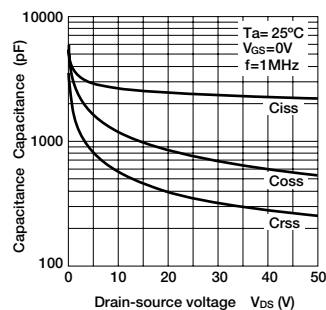
V_{DS}—V_{GS} Characteristics



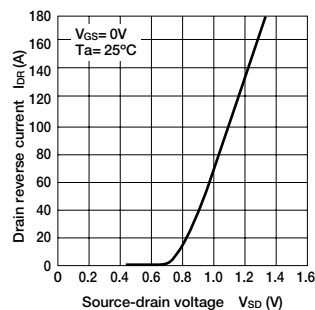
R_{DS (ON)}—T_c Characteristics



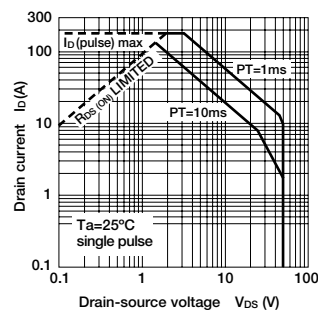
Capacitance—V_{DS} Characteristics



I_{DR}—V_{SD} Characteristics



Safe Operating Area



P_D—T_a Derating

