

MOS FET — FKV560S (under development)

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{DSS}	50	V
V _{GSS}	±20	V
I _D	±45	A
I _{D (pulse)*}	±135	A
P _D	60 (Tc=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} = -20V			-5	μA
I _{DSS}	V _{DS} = 50V, V _{GS} = 0V			100	μA
V _{TH}	V _{DS} = 10V, I _D = 250μA	1.0		2.0	V
R _{e (yfs)}	V _{DS} = 10V, I _D = 25A	20.0			S
R _{DS (ON)}	V _{GS} = 10V, I _D = 25A		9	11	mΩ
C _{iss}	V _{DS} = 10V		2000		pF
C _{oss}	f = 1.0MHz		1000		pF
C _{rss}	V _{GS} = 0V		150		pF
t _{d (on)}	I _D = 25A				ns
t _r	V _{DD} ≐ 12V				ns
t _{d (off)}	R _L = 0.48Ω		To be defined		ns
t _f	V _{GS} = 10V				ns
V _{SD}	I _{SD} = 50A, V _{GS} = 0V		1.0	1.5	V

External Dimensions TO220S

