

# MOS FET — FKV460FP (under development)

## Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V <sub>DSS</sub>	40	V
V <sub>GSS</sub>	±20	V
I <sub>D</sub>	±60	A
I <sub>D</sub> (pulse)*	±180	A
P <sub>D</sub>	70 (T <sub>C</sub> =25°C)	W
T <sub>ch</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

\* P<sub>w</sub> ≤ 100μs, duty ≤ 1%

## Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
V <sub>(BR) DSS</sub>	I <sub>D</sub> = 100μA, V <sub>GS</sub> = 0V	40			V
I <sub>GSS</sub>	V <sub>GS</sub> = +20V			+10	μA
	V <sub>GS</sub> = -20V			-5	μA
I <sub>DSS</sub>	V <sub>DS</sub> = 40V, V <sub>GS</sub> = 0V			100	μA
V <sub>TH</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 250μA	1.3		2.3	V
Re (y/s)	V <sub>DS</sub> = 10V, I <sub>D</sub> = 25A	20.0			S
R <sub>DS (ON)</sub>	V <sub>GS</sub> = 10V, I <sub>D</sub> = 25A		6	8	mΩ
C <sub>iss</sub>	V <sub>DS</sub> = 10V		2000		pF
C <sub>oss</sub>	f = 1.0MHz		1200		pF
C <sub>rss</sub>	V <sub>GS</sub> = 0V		200		pF
t <sub>d (on)</sub>	I <sub>D</sub> = 25A				ns
t <sub>r</sub>	V <sub>DD</sub> ≐ 12V		To be defined		ns
t <sub>d (off)</sub>	R <sub>L</sub> = 0.48Ω				ns
t <sub>f</sub>	V <sub>GS</sub> = 10V				ns
V <sub>SD</sub>	I <sub>SD</sub> = 50A, V <sub>GS</sub> = 0V		1.0	1.5	V

## External Dimensions FM100 (full-mold)

