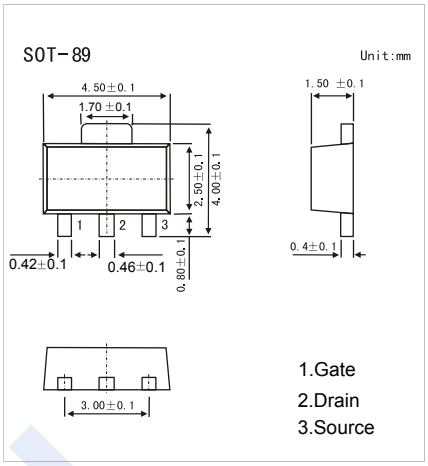
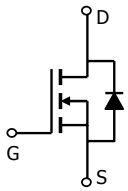
N-Channel MOSFET
KXF3055



■ Features

- V_{DS} (V) = 60V
- I_D = 5.3 A (V_{GS} = 10V)
- $R_{DS(ON)}$ < 60mΩ (V_{GS} = 10V)
- $R_{DS(ON)}$ < 80mΩ (V_{GS} = 4.5V)



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	5.3	A
Pulsed Drain Current	I_{DM}	30	
Power Dissipation	P_D	2	W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	I_D=250μA, V_{GS}=0V	60			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=48V, V_{GS}=0V			0.1	uA
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS}=±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} , I_D=250μA	1		2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V, I_D=5.3A			60	mΩ
		V_{GS}=4.5V, I_D=4.7A			80	
Forward Transconductance	g_{FS}	V_{DS}=5V, I_D=4.7A	6			S
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=25V, f=1MHz			800	pF
Output Capacitance	C_{oss}				250	
Reverse Transfer Capacitance	C_{rss}				60	
Total Gate Charge	Q_g	V_{GS}=10V, V_{DS}=40V, I_D=4.7A		9		nC
Gate Source Charge	Q_{gs}			2		
Gate Drain Charge	Q_{gd}			6		
Turn-On DelayTime	$t_{d(on)}$	V_{DS}=25V, I_D=1A,R_G=6Ω			20	ns
Turn-On Rise Time	t_r				20	
Turn-Off DelayTime	$t_{d(off)}$				50	
Turn-Off Fall Time	t_f				20	
Diode Forward Voltage	V_{SD}	I_S=2A,V_{GS}=0V			1.25	V

■ Marking

Marking	KA