

## MOS Field Effect Transistor 2SK2415

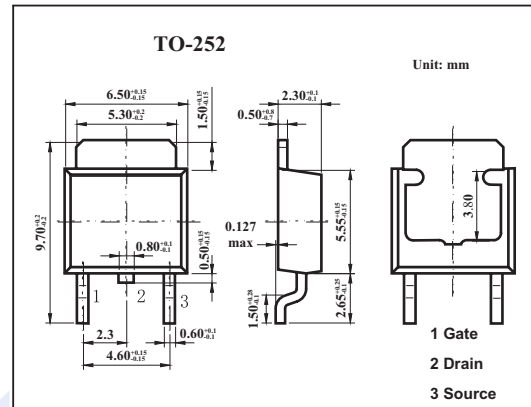
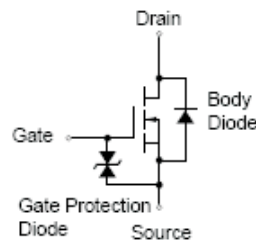
### ■ Features

#### ● Low On-Resistance

$R_{DS(on)1} = 0.10 \Omega$  MAX. (@  $V_{GS} = 10 V, I_D = 4.0 A$ )

$R_{DS(on)2} = 0.15 \Omega$  MAX. (@  $V_{GS} = 4 V, I_D = 4.0 A$ )

#### ● Low $C_{iss}$ $C_{iss} = 570$ pF TYP.



### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	60	V
Gate to source voltage	$V_{GS}$	$\pm 20$	V
Drain current	$I_D$	$\pm 8.0$	A
	$I_{DP}^*$	$\pm 32$	A
Power dissipation	$P_D$	20	W
Channel temperature	$T_{ch}$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

\*  $PW \leq 10 \mu s, Duty Cycle \leq 1\%$

### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	$I_{DSS}$	$V_{DS}=60V, V_{GS}=0$			10	$\mu A$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0$			$\pm 10$	$\mu A$
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS}=10V, I_D=1mA$	1.0	1.6	2.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=4A$	5.0	8.4		S
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=4A$		0.07	0.10	$\Omega$
		$V_{GS}=4V, I_D=4A$		0.10	0.15	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS}=10V, V_{GS}=0, f=1MHz$		570		pF
Output capacitance	$C_{oss}$			290		pF
Reverse transfer capacitance	$C_{rss}$			75		pF
Turn-on delay time	$t_{on}$				5	ns
Rise time	$t_r$	$I_D=4A, V_{GS(on)}=10V, R_G=10\Omega, V_{DD}=30V$		60		ns
Turn-off delay time	$t_{off}$			75		ns
Fall time	$t_f$				40	ns