

MOS Field Effect Transistor 2SK2415

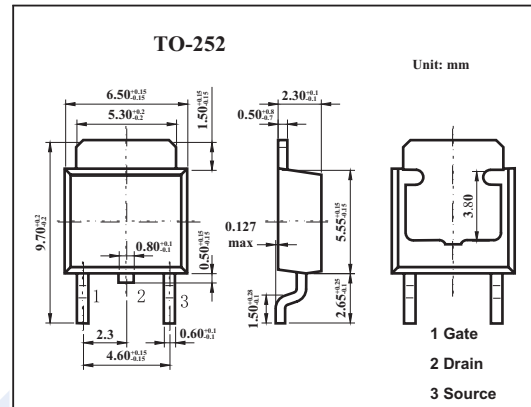
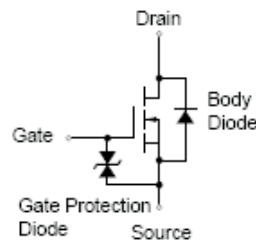
■ Features

● 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}	± 20	V
Drain current	I_D	± 8.0	A
	I_{DP}^*	± 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	μA	
Gate leakage current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$			± 10	μA	
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	Ω	
		$V_{GS}=4V, I_D=4A$		0.10	0.15	Ω	
Input capacitance	C_{iss}	$I_D=4A, V_{GS(on)}=10V, R_G=10 \Omega, V_{DD}=30V$		570		pF	
Output capacitance	C_{oss}		$V_{DS}=10V, V_{GS}=0, f=1MHz$		290		pF
Reverse transfer capacitance	C_{rss}				75		pF
Turn-on delay time	t_{on}				5		ns
Rise time	t_r			60		ns	
Turn-off delay time	t_{off}			75		ns	
Fall time	t_f			40		ns	