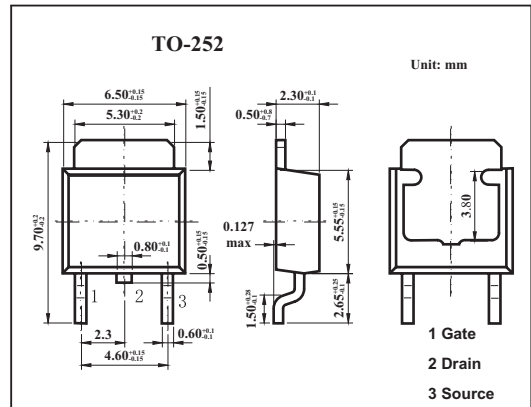
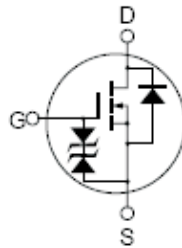


2SK2735S

■ Features

- Low on-resistance
- $R_{DS} = 20\text{ m}\Omega$ typ.
- High speed switching
- 4V gate drive device can be driven from 5V source



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	30	V
Gate to source voltage	V_{GSS}	± 20	V
Drain current	I_D	20	A
	I_{DP}^*	80	A
Power dissipation	P_D	20	W
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit	
Drain source breakdown voltage	V_{DSS}	$I_D=10\text{mA}, V_{GS}=0\text{V}$	30			V	
Drain cut-off current	I_{DSS}	$V_{DS}=30\text{V}, V_{GS}=0$			10	μA	
Gate leakage current	I_{GSS}	$V_{GS}=\pm 16\text{V}, V_{DS}=0$			± 10	μA	
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=1\text{mA}$	1.0		2.0	V	
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10\text{V}, I_D=10\text{A}$	8	16		S	
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}, I_D=10\text{A}$		20	28	$\text{m}\Omega$	
		$V_{GS}=4\text{V}, I_D=10\text{A}$		35	50	$\text{m}\Omega$	
Input capacitance	C_{iss}	$I_D=10\text{A}, V_{GS(on)}=10\text{V}, R_L=1\ \Omega$		750		pF	
Output capacitance	C_{oss}		$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		520		pF
Reverse transfer capacitance	C_{rss}				210		pF
Turn-on delay time	t_{on}				16		ns
Rise time	t_r				225		ns
Turn-off delay time	t_{off}				85		ns
Fall time	t_f				90		ns