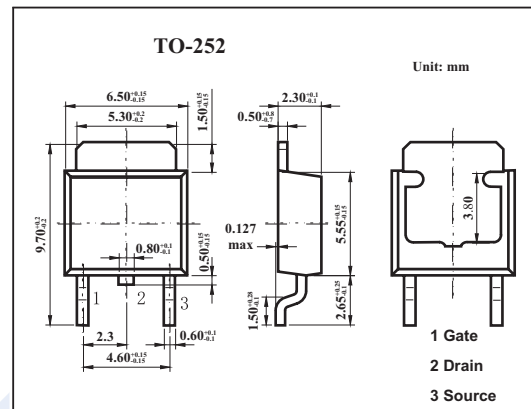
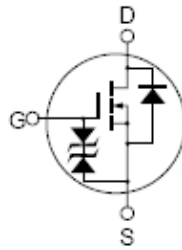


Silicon N-Channel MOSFET 2SK2735S

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	Test conditions	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}	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		750		pF
Output capacitance	C_{oss}			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}		$I_D=10\text{A}, V_{GS(on)}=10\text{V}, R_L=1\Omega$		85	ns
Fall time	t_f				90	ns