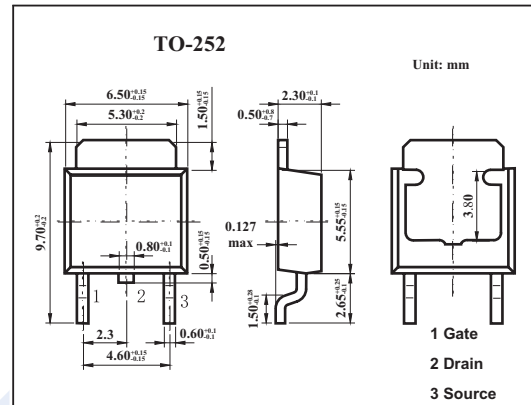
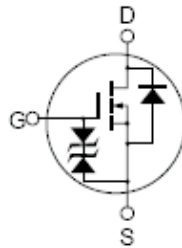


## Silicon N-Channel MOSFET 2SK2735S

### ■ 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	$V_{GSS}$	$\pm 20$	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	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 16\text{V}, V_{DS}=0$			$\pm 10$	$\mu\text{A}$
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	$t_{off}$				85	ns
Fall time	$t_f$				90	ns