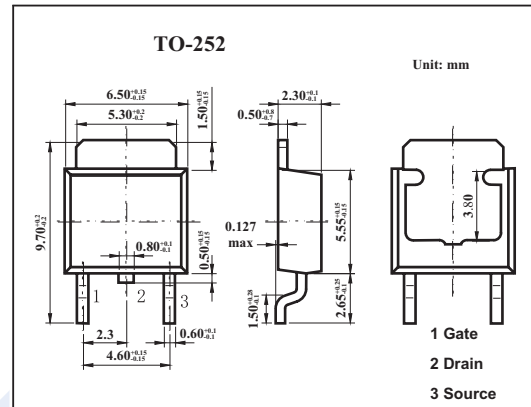
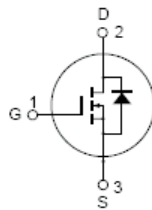


## Silicon N Channel MOSFET 2SK3274S

### ■ Features

- Low on-resistance  
 $R_{DS(on)} = 10 \text{ m}\Omega$  typ.
- 4.5 V gate drive device
- High speed switching



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

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	30	V
Gate to source voltage	$V_{GS}$	$\pm 20$	V
Drain current	$I_D$	30	A
	$I_{DP}^*$	120	A
Power dissipation	$P_D$	30	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 surrender voltage	$V_{DS}$	$I_D=10\text{mA}, V_{GS}=0$	30			V	
Drain cut-off current	$I_{DSS}$	$V_{DS}=30\text{V}, V_{GS}=0$			10	$\mu\text{A}$	
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 20\text{V}, V_{DS}=0$			$\pm 10$	$\mu\text{A}$	
Gate cutoff voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=1\text{mA}$	1.5		3.0	V	
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10\text{V}, I_D=15\text{A}$	18	30		S	
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}, I_D=15\text{A}$		10	13	$\text{m}\Omega$	
		$V_{GS}=4.5\text{V}, I_D=15\text{A}$		20	30	$\text{m}\Omega$	
Input capacitance	$C_{iss}$	$I_D=15\text{A}, V_{GS(on)}=10\text{V}, R_L=2\Omega$		1500		$\mu\text{F}$	
Output capacitance	$C_{oss}$		$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		500		$\mu\text{F}$
Reverse transfer capacitance	$C_{rss}$				250		$\mu\text{F}$
Turn-on delay time	$t_{on}$				22		ns
Rise time	$t_r$				170		ns
Turn-off delay time	$t_{off}$				110		ns
Fall time	$t_f$				145		ns