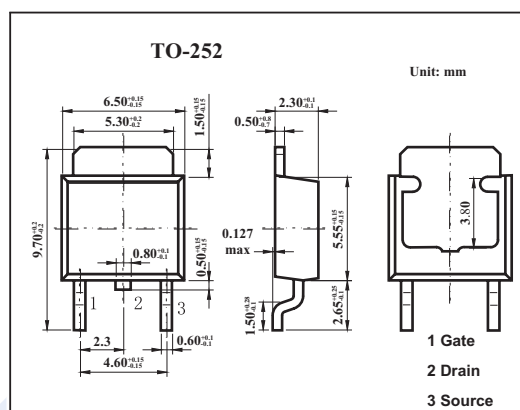
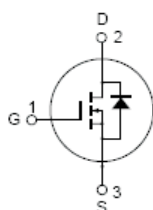


Silicon N Channel MOSFET

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}	± 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	μA
Gate leakage current	I_{GSS}	$V_{GS} = \pm 20\text{V}, V_{DS}=0$			± 10	μA
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}	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		1500		pF
Output capacitance	C_{oss}			500		pF
Reverse transfer capacitance	C_{rss}			250		pF
Turn-on delay time	t_{on}	$I_D=15\text{A}, V_{GS(on)}=10\text{V}, R_L=2\Omega$		22		ns
Rise time	t_r			170		ns
Turn-off delay time	t_{off}			110		ns
Fall time	t_f			145		ns