

# 2SK2474

## Silicon N-Channel MOS

For high-speed switching

### ■ Features

- Low ON-resistance  $R_{DS(on)}$
- High-speed switching
- High drain-source voltage ( $V_{DSS}$ )

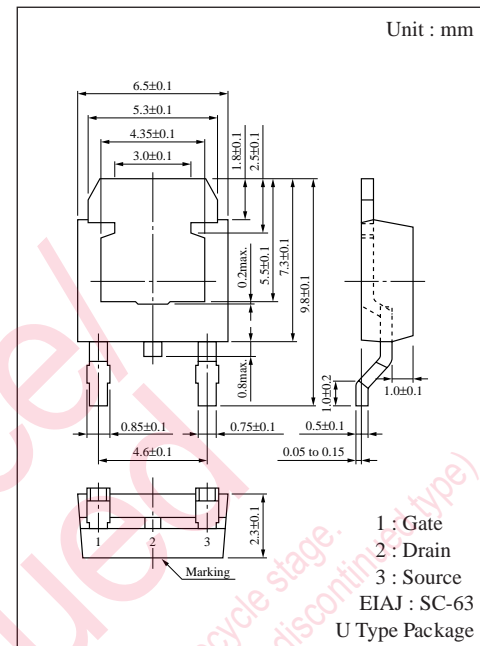
### ■ Absolute Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

Parameter	Symbol	Rating	Unit
Drain-Source breakdown voltage	$V_{DSS}$	250	V
Gate-Source voltage	$V_{GSS}$	$\pm 30$	V
Drain current	$I_D$	$\pm 2$	A
Max drain current	$I_{DP}$	$\pm 4$	A
Allowable power dissipation	$P_D^*$	10	W
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $T_c = 25^\circ\text{C}$

### ■ Electrical Characteristics ( $T_c = 25^\circ\text{C}$ )

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	$I_{DSS}$	$V_{DS} = 200\text{V}, V_{GS} = 0$			0.1	mA
Gate-Source leakage current	$I_{GSS}$	$V_{GS} = \pm 30\text{V}, V_{DS} = 0$			$\pm 1$	$\mu\text{A}$
Drain-Source breakdown voltage	$V_{DSS}$	$I_D = 1\text{mA}, V_{GS} = 0$	250			V
Gate threshold voltage	$V_{th}$	$V_{DS} = 10\text{V}, I_D = 1\text{mA}$	1		5	V
Drain-Source ON-resistance	$R_{DS(on)}$	$V_{GS} = 10\text{V}, I_D = 1\text{A}$		1.2	2	$\Omega$
Forward transadmittance	$ Y_{fs} $	$V_{DS} = 25\text{V}, I_D = 1\text{A}$	0.5	1		S
Input capacitance	$C_{iss}$	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		280		pF
Output capacitance	$C_{oss}$			80		pF
Feedback capacitance	$C_{rss}$			30		pF
Turn-on time	$t_{on}$		$V_{GS} = 10\text{V}, I_D = 1\text{A},$		30	
Fall time	$t_f$	$V_{DD} = 100\text{V}, R_L = 100\Omega$		45		ns
Turn-off time (delay time)	$t_{d(off)}$			90		ns



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