

2SJ0675

Silicon P-channel MOSFET

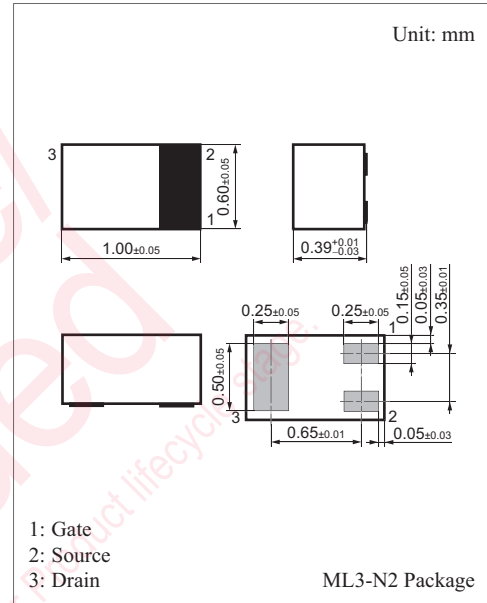
For switching circuits

■ Features

- Low ON resistance R_{on}
- High-speed switching
- Optimum for high-density mounting and downsizing of the equipment for Ultraminiature leadless package
0.6 mm × 1.0 mm (height 0.39 mm)

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

Parameter	Symbol	Rating	Unit
Drain-source surrender voltage	V_{DSS}	-30	V
Gate-source surrender voltage	V_{GSS}	±12	V
Drain current	I_D	-100	mA
Peak drain current	I_{DP}	-200	mA
Drain power dissipation	P_D	100	mW
Channel temperature	T_{ch}	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

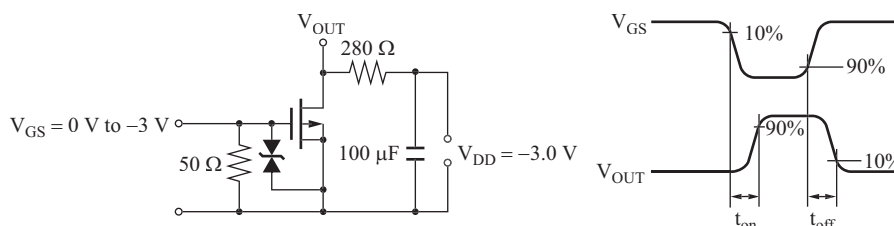


■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source surrender voltage	V_{DSS}	$I_D = -10 \mu\text{A}, V_{GS} = 0$	-30			V
Drain-source cutoff current	I_{DSS}	$V_{DS} = -20 \text{V}, V_{GS} = 0$			-1.0	μA
Gate-source cutoff current	I_{GSS}	$V_{GS} = \pm 10 \text{V}, V_{DS} = 0$			±10	μA
Gate threshold voltage	V_{TH}	$I_D = -1.0 \mu\text{A}, V_{DS} = -3.0 \text{V}$	-0.5	-1.0	-1.5	V
Drain-source ON resistance	$R_{DS(on)}$	$I_D = -10 \text{mA}, V_{GS} = -2.5 \text{V}$		13	30	Ω
		$I_D = -10 \text{mA}, V_{GS} = -4.0 \text{V}$		9	18	
Forward transfer admittance	$ Y_{fs} $	$I_D = -10 \text{mA}, V_{DS} = -3 \text{V}, f = 1 \text{kHz}$	20	40		mS
Short-circuit input capacitance (Common source)	C_{iss}	$V_{DS} = -3 \text{V}, V_{GS} = 0, f = 1 \text{MHz}$		12		pF
Short-circuit output capacitance (Common source)	C_{oss}			13		pF
Reverse transfer capacitance (Common source)	C_{rss}			7		pF
Turn-on time *	t_{on}	$V_{DD} = -3 \text{V}, V_{GS} = 0 \text{V to } -3 \text{V}, I_D = -10 \text{mA}$		300		ns
Turn-off time *	t_{off}	$V_{DD} = -3 \text{V}, V_{GS} = -3 \text{V to } 0 \text{V}, I_D = -10 \text{mA}$		400		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. * : t_{on}, t_{off} measurement circuit



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