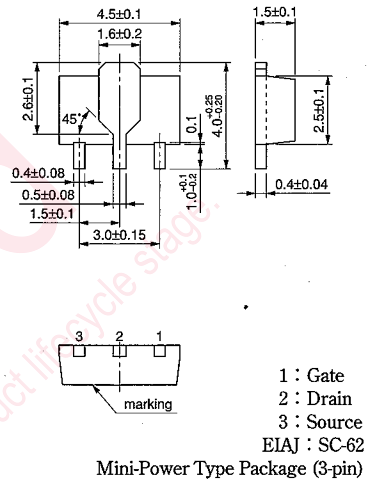
Panasonic

2SK2277

Silicon N-Channel MOS

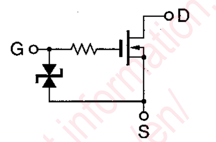
For switching



■ Features

- Low ON-resistance $R_{DS(on)}$
- High-speed switching
- Downsizing of sets by mini-type package and automatic insertion by magazine packing are available.

■ Internal Connection



■ Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Drain-Source breakdown voltage	V_{DSS}	60	V
Gate-Source voltage	V_{GSS}	±20	V
Drain current	I_D	±1	A
Max drain current	I_{DP}	±2	A
Allowable power dissipation	P_D *	1	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	−55 to +150	℃

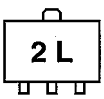
* PC board : Copper foil area of drain portion shoud be 1cm^2 or more, thickness 1.7mm.

■ Electrical Characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I_{DSS}	V_{DS}=50V, V_{GS}=0			10	μA
Gate-Source leakage current	I_{GSS}	V_{GS}=±15V, V_{DS}=0			±10	μA
Drain-Source breakdown voltage	V_{DSS}	I_D=0.1mA, V_{GS}=0	60			V
Gate-Source voltage	V_{GSS}	I_{GS}=0.1mA, V_{DS}=0	±20			V
Gate threshold voltage	V_{th}	V_{DS}=5V, I_D=1mA	0.8		2	V
Drain-Source ON-resistance	$R_{DS(on)}1$ *1	V_{GS}=4V, I_D=0.5A		0.72	1	Ω
	$R_{DS(on)}2$ *1	V_{GS}=10V, I_D=0.5A		0.55	0.85	Ω
Forward transadmittance	$\|Y_{fs}\|$ *1	V_{DS}=10V, I_D=0.5A	0.5			S
Input capacitance	C_{iss}	V_{DS}=10V, V_{GS}=0, f=1MHz		75		pF
Output capacitance	C_{oss}			30		pF
Feedback capacitance	C_{rss}			7		pF
Turn-on time	t_{on}	V_{GS}=10V, I_D=0.5A, V_{DD}=10V, R_L=20Ω		35		ns
Fall time	t_f			80		ns
Turn-off time (delay time)	$t_{d(off)}$			130		ns

*1 Pulse measurement

■ Marking



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