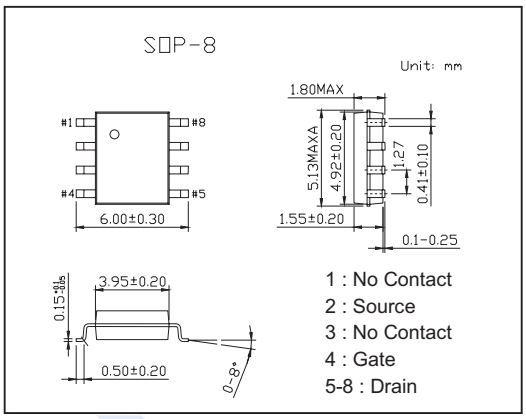
N-Channel Silicon MOSFET
2SK2859

■ Features

- Low On resistance.
- Ultrahigh-speed switching.
- 4V drive.



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	100	V
Gate to source voltage	V_{GSS}	±15	V
Drain current	I_D	2	A
	I_{dp} *	8	A
Power dissipation	P_D	1.6	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤10μs,Duty Cycle≤1%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain to source breakdown voltage	V_{DSS}	I_D=1mA,V_{GS}=0	100			V
Drain cut-off current	I_{DSS}	V_{DS}=100V,V_{GS}=0			100	μA
Gate leakage current	I_{GSS}	V_{GS}=±12V,V_{DS}=0			±10	μA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=10V,I_D=1mA	1.0		2.0	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=10V,I_D=2A	2.5	4		S
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=10V,I_D=2A		0.3	0.4	Ω
		V_{GS}=4V,I_D=2A		0.4	0.55	Ω
Input capacitance	C_{iss}	V_{DS}=20V,V_{GS}=0,f=1MHZ		380		pF
Output capacitance	C_{oss}			80		pF
Reverse transfer capacitance	C_{rss}			15		pF
Turn-on delay time	t_{on}	I_D=2A,$V_{GS(on)}$=10V,R_L=25Ω,V_{DD}=50V		10		ns
Rise time	t_r			13		ns
Turn-off delay time	t_{off}			70		ns
Fall time	tf			30		ns
Diode forward voltage	V_{SD}	I_S=2A,V_{GS}=0		1	1.2	V