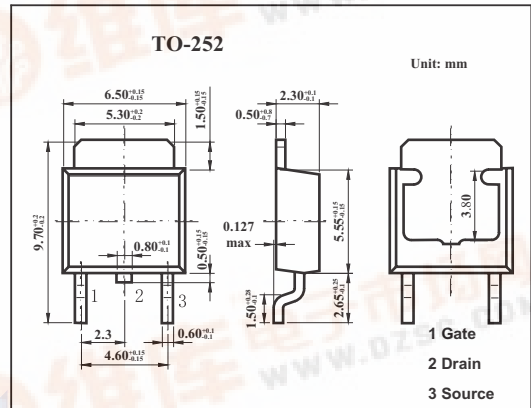
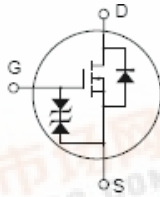


SMD Type MOSFET

Silicon N-Channel MOSFET
2SK2059S

■ Features

- Low on-resistance
- High speed switching
- No Secondary Breakdown
- Suitable for Switching regulator, DC - DC converter



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{bss}	600	V
Gate to source voltage	V _{GSS}	±30	V
Drain current	I _D	3	A
Power dissipation	P _D	20	W
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{bS} =500V, V _{Gs} =0			100	μA
Gate leakage current	I _{GSS}	V _{Gs} =±25V, V _{Ds} =0			±10	μA
Gate to source cutoff voltage	V _{Gs(off)}	V _{bS} =10V, I _D =1mA	2.0		3.0	V
Forward transfer admittance	Y _{fs}	V _{bS} =10V, I _D =10A	1.2	2.0		S
Drain to source on-state resistance	R _{DS(on)}	V _{Gs} =10V, I _D =1A		3.8	5.0	Ω
Input capacitance	C _{iss}	V _{bS} =10V, V _{Gs} =0, f=1MHZ		295		pF
Output capacitance	C _{oss}			70		pF
Reverse transfer capacitance	C _{rss}			12		pF
Turn-on delay time	t _{d(on)}				8	ns
Rise time	t _r	I _D =1A, V _{Gs(on)} =10V, R _L =30 Ω		25		ns
Turn-off delay time	t _{d(off)}			65		ns
Fall time	t _f			30		ns

