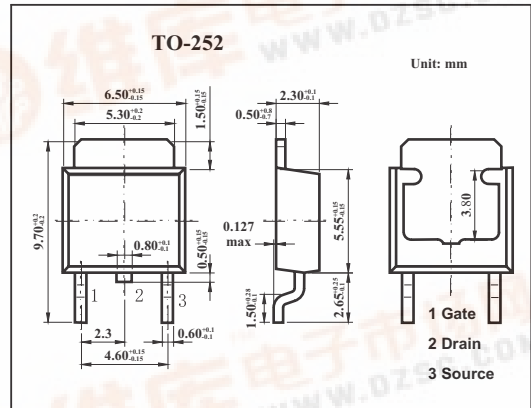
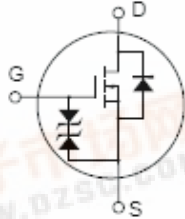


SMD Type MOSFET

Silicon N-Channel MOSFET
2SK1152S

Features

- Low on-resistance
- High speed switching
- Low drive current
- No secondary breakdown
- Suitable for switching regulator and DC-DC converter



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{DSS}	500	V
Gate to source voltage	V _{GSS}	±30	V
Drain current (DC)	I _D	1.5	A
Drain current(pulse) *	I _D	6	A
Power dissipation	P _D	20	W
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10 μs, duty cycle ≤ 1%

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain to source breakdown voltage	V _{DSS}	I _D =10mA, V _{GS} =0	500			V
Gate to source breakdown voltage	V _{GSS}	I _D =±100 μA, V _{DS} =0	±30			V
Drain cut-off current	I _{DSS}	V _{DS} =400V, 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 _{DS} =10V, I _D =1mA	2.0		3.0	V
Forward transfer admittance	Y _{fs}	V _{DS} =20V, I _D =1A	0.6	1.1		s
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =10V, I _D =1A		4.0	6.0	Ω
Input capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0, f=1MHZ		160		pF
Output capacitance	C _{oss}		45		pF	
Reverse transfer capacitance	C _{rss}		5		pF	
Turn-on delay time	t _{d(on)}		I _D =1A, V _{GS(on)} =0, R _L =30 Ω		5	
Rise time	t _r	10			ns	
Turn-off delay time	t _{d(off)}	20			ns	
Fall time	t _f	10			ns	

