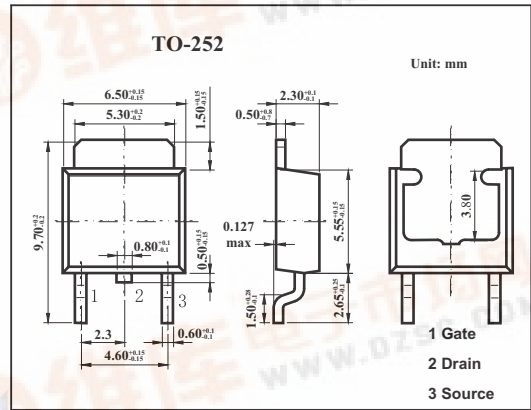
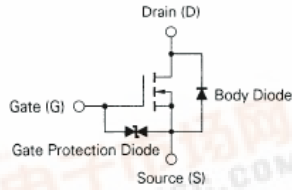


SMD Type MOSFET

MOS Field Effect Power Transistor
2SK1954

Features

- Low on-resistance
RDS(on)=0.65 Ω (VGS=10V, ID=2A)
- Low Ciss Ciss=300pF typ
- Built-in G-S Gate Protection Diode
- High Avalanche Capability Ratings



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{DSS}	180	V
Gate to source voltage	V _{GSS}	±20	V
Drain current	I _D	±4.0	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	Testconditions	Min	Typ	Max	Unit	
Drain cut-off current	I _{DSS}	V _{DS} =180V, V _{GS} =0			100	μA	
Gate leakage current	I _{GSS}	V _{GS} =±20V, V _{DS} =0			±10	μA	
Gate to Source Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	2.0		4.0	V	
Forward transfer admittance	Y _{fs}	V _{DS} =10V, I _D =2.0A	0.5			S	
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =10V, I _D =2.0A		0.52	0.65	Ω	
Input capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0, f=1MHZ		300		pF	
Output capacitance	C _{oss}			170		pF	
Reverse transfer capacitance	C _{rss}			50		pF	
Turn-on delay time	t _{d(on)}		I _D =2A, V _{GS(on)} =10V, R _L =50 Ω		9		ns
Rise time	t _r				12		ns
Turn-off delay time	t _{d(off)}			28		ns	
Fall time	t _f			12		ns	

