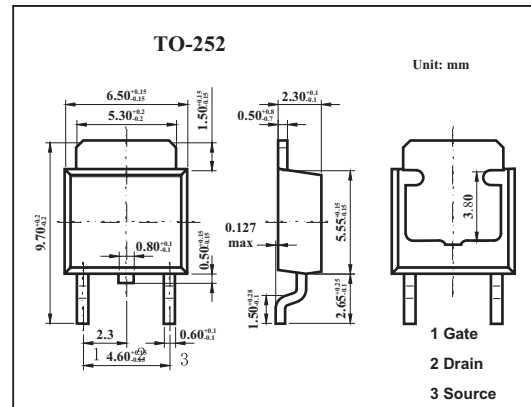


MOS Field Effect Transistor

2SK3634

■ Features

- High voltage: $V_{DS} = 200\text{ V}$
- Gate voltage rating: $\pm 30\text{ V}$
 $R_{DS(on)} = 0.60\ \Omega\text{ MAX. (}V_{GS} = 10\text{ V, }I_D = 3.0\text{ A)}$
- Low C_{iss} : $C_{iss} = 270\text{ pF TYP. (}V_{DS} = 10\text{ V, }V_{GS} = 0\text{ V)}$
- Built-in gate protection diode



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{DSS}	200	V
Gate to source voltage	V _{GSS}	±30	V
Drain current	I _D	±6.0	A
	I _{DP} *	±18	A
Power dissipation T _C =25°C T _A =25°C	P _D	20	W
		1.0	
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* $PW \leq 10 \mu s$, Duty Cycle $\leq 1\%$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{DS} =200V,V _{GS} =0			10	μ A
Gate leakage current	I _{GSS}	V _{GS} =± 30V,V _{DS} =0			± 10	μ A
Gate cut off voltage	V _{GS(off)}	V _{DS} =10V,I _D =1mA	2.5	3.5	4.5	V
Forward transfer admittance	Y _{fs}	V _{DS} =10V,I _D =3.0A	2	4		S
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =10V,I _D =3.0A		0.47	0.60	Ω
Input capacitance	C _{iss}	V _{DS} =10V,V _{GS} =0,f=1MHZ		270		pF
Output capacitance	C _{OSS}			75		pF
Reverse transfer capacitance	C _{RSS}			33		pF
Turn-on delay time	t _{on}	I _D =3.0A,V _{GS(on)} =10V,R _G =0 Ω ,V _{DD} =100V		4		ns
Rise time	t _r			8		ns
Turn-off delay time	t _{off}			14		ns
Fall time	t _f			6		ns
Total Gate Charge	Q _G	V _{DD} = 160V		9		nC
Gate to Source Charge	Q _{GS}	V _{GS} = 10 V		1.5		nC
Gate to Drain Charge	Q _{GD}	I _D = 6.0A		4.5		nC