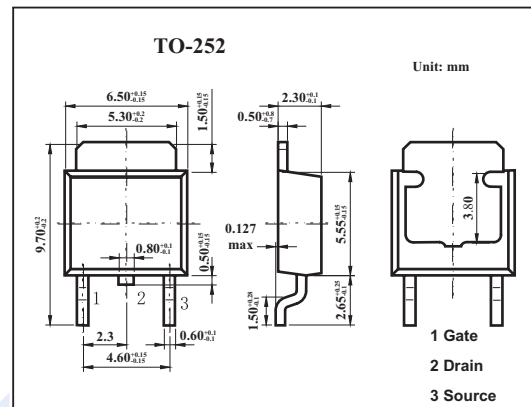# N-Channel Silicon MOSFET
2SK2887

■ Features

● Low on-resistance.

● Fast switching speed.

● Wide SOA (safe operating area).

● Gate-source voltage (VGSS) guaranteed to be ±30V.

● Easily designed drive circuits.

● Easy to parallel.

TO-252

Unit: mm

1 Gate
2 Drain
3 Source

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	VDSS	200	V
Gate to source voltage	VGSS	±30	V
Drain current	ID	3	A
	Idp *	12	A
Power dissipation	PD	20	W
Channel temperature	Tch	150	℃
Storage temperature	Tstg	-55 to +150	℃

* PW≤10μs,Duty Cycle≤1%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain to source breakdown voltage	VDSS	ID=1mA,VGS=0	200			V
Drain cut-off current	IDSS	VDS=200V,VGS=0			100	μA
Gate leakage current	IGSS	VGS=±30V,VDS=0			±100	nA
Gate threshold voltage	VGS(th)	VDS=10V,ID=1mA	2.0		4.0	V
Forward transfer admittance	|Yfs|	VDS=10V,ID=1.5A	0.6	1.5		S
Drain to source on-state resistance	RDS(on)	VGS=10V,ID=1.5A		0.7	0.9	Ω
Input capacitance	Ciss	VDS=10V,VGS=0,f=1MHZ		230		pF
Output capacitance	Coss			100		pF
Reverse transfer capacitance	Crss			35		pF
Turn-on delay time	ton	ID=1.5A,VGS(on)=10V,RL=68Ω,RG=10Ω,VDD=100V		10		ns
Rise time	tr			12		ns
Turn-off delay time	toff			26		ns
Fall time	tf			34		ns
Reverse recovery time	trr	IDR=3A,VGS=0V,di/dt=100A/μs		96		ns
Reverse recovery charge	Qrr			0.56		μC