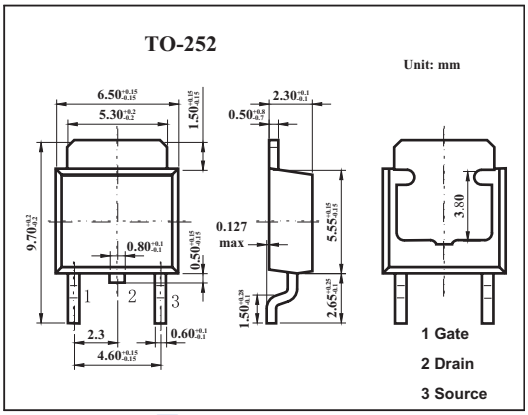
TY Semicondutor®

Product specification

2SK2887

■ Features

- Low on-resistance.
- Fast switching speed.
- Wide SOA (safe operating area).
- Gate-source voltage (V_{GSS}) guaranteed to be ±30V.
- Easily designed drive circuits.
- Easy to parallel.



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	200	V
Gate to source voltage	V_{GSS}	±30	V
Drain current	I_D	3	A
	I_{dp} *	12	A
Power dissipation	P_D	20	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤10μs,Duty Cycle≤1%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain to source breakdown voltage	V_{DSS}	I_D=1mA,V_{GS}=0	200			V
Drain cut-off current	I_{DSS}	V_{DS}=200V,V_{GS}=0			100	μA
Gate leakage current	I_{GSS}	V_{GS}=±30V,V_{DS}=0			±100	nA
Gate threshold voltage	$V_{GS(th)}$	V_{DS}=10V,I_D=1mA	2.0		4.0	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=10V,I_D=1.5A	0.6	1.5		S
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=10V,I_D=1.5A		0.7	0.9	Ω
Input capacitance	C_{iss}	V_{DS}=10V,V_{GS}=0,f=1MHZ		230		pF
Output capacitance	C_{oss}			100		pF
Reverse transfer capacitance	C_{rss}			35		pF
Turn-on delay time	t_{on}	I_D=1.5A,$V_{GS(on)}$=10V,R_L=68Ω,RG=10Ω,V_{DD}=100V		10		ns
Rise time	t_r			12		ns
Turn-off delay time	t_{off}			26		ns
Fall time	tf			34		ns
Reverse recovery time	t_{rr}	I_{DR}=3A,V_{GS}=0V,di/dt=100A/μs		96		ns
Reverse recovery charge	Q_{rr}			0.56		μC