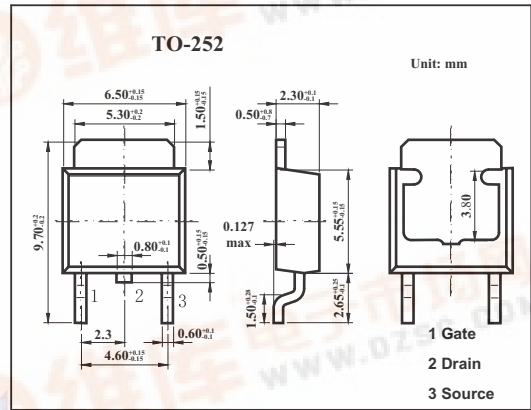


SMD Type MOSFET

N-Channel Silicon MOSFET  
2SK2887

Features

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



Absolute Maximum Ratings  $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	200	V
Gate to source voltage	$V_{GS}$	$\pm 30$	V
Drain current	$I_D$	3	A
	$I_{DP}^*$	12	A
Power dissipation	$P_D$	20	W
Channel temperature	$T_{ch}$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

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

Electrical Characteristics  $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain to source breakdown voltage	$V_{BSS}$	$I_D=1mA, V_{GS}=0$	200			V
Drain cut-off current	$I_{DSS}$	$V_{DS}=200V, V_{GS}=0$			100	$\mu A$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 30V, V_{DS}=0$			$\pm 100$	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	$\Omega$
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	$t_{on}$				10	
Rise time	$t_r$	$I_D=1.5A, V_{GS(on)}=10V, R_L=68\Omega, R_G=10\Omega, V_{DD}=100V$		12		ns
Turn-off delay time	$t_{off}$			26		ns
Fall time	$t_f$			34		ns
Reverse recovery time	$t_{rr}$	$I_{DR}=3A, V_{GS}=0V, di/dt=100A/\mu s$		96		ns
Reverse recovery charge	$Q_{rr}$			0.56		$\mu C$

