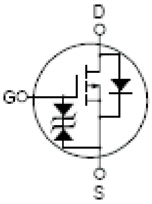
Hight Speed Power Switching

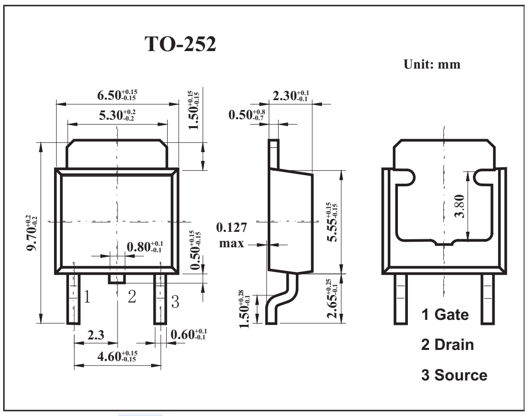
2SJ530S

■ Features

- ● Low on-resistance

  $R_{DS(on)}$ = 0.08 Ω typ.
- ● High speed switching
- ● 4V gate drive devices.





■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	-60	V
Gate to source voltage	V_{GSS}	±20	V
Drain current (DC)	I_D	-15	A
Drain current(pulse) *	I_D	-60	A
Power dissipation	P_D	30	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤ 10 μ s, duty cycle ≤ 1 %

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain to source breakdown voltage	V_{DSS}	I_D=-10mA,V_{GS}=0	-60			V
Gate to source breakdown voltage	V_{GSS}	I_G=±100 μ A ,V_{DS}=0	±20			V
Drain cut-off current	I_{DSS}	V_{DS}=-60V,V_{GS}=0			-10	μ A
Gate leakage current	I_{GSS}	V_{GS}=±16V,V_{DS}=0			±10	μ A
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=-10V,I_D=-1mA	-1.0		-2.0	V
Forward transfer admittance	$\vert Y_{fs} \vert$	V_{DS}=-10V,I_D=-8A	6.5	11		S
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=-10V,I_D=-8A		0.08	0.10	Ω
		V_{GS}=-4.0V,I_D=-8A		0.11	0.16	Ω
Input capacitance	C_{iss}	V_{DS}=-10V,V_{GS}=0,f=1MHZ		850		pF
Output capacitance	C_{oss}			420		pF
Reverse transfer capacitance	C_{rss}			110		pF
Turn-on delay time	$t_{d(on)}$	$V_{GS(on)}$=-10V,I_D=--8A ,R_L=3.75 Ω		12		ns
Rise time	t_r			75		ns
Turn-off delay time	$t_{d(off)}$			125		ns
Fall time	t_f			75		ns