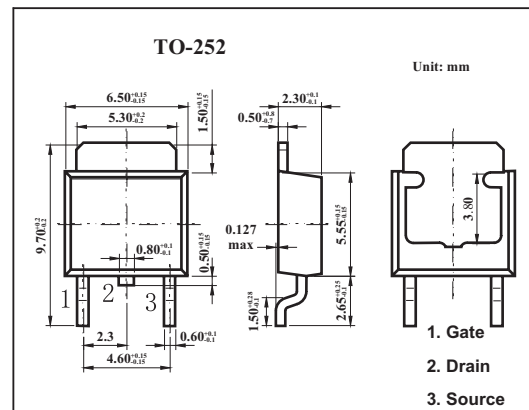
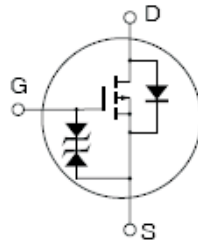


Silicon P-Channel MOS FET

2SJ130S

■ Features

- Low on-resistance
- High speed switching
- Low drive current
- No secondary breakdown
- Suitable for switching regulator, DC-DC converter and ultrasonic power oscillators



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DS}	-300	V
Gate to source voltage	V_{GS}	± 20	V
Drain current	$I_{D(DS)}$	-1	A
Drain peak current	$I_{D(pulse)}$	-2	A
Body to drain diode reverse drain current	I_{DR}	-1	A
Channel dissipation ($T_c=25^\circ\text{C}$)	P_{ch}	20	W
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

2SJ130S

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain to source breakdown voltage	$V_{(BR)DSS}$	$I_D = -10 \text{ mA}, V_{GS} = 0$	-300			V
Gate to source breakdown voltage	$V_{(BR)GSS}$	$I_G = \pm 100 \text{ } \mu\text{A}, V_{DS} = 0$	± 20			V
Gate to source leak current	I_{GSS}	$V_{GS} = \pm 16 \text{ V}, V_{DS} = 0$			± 10	μA
Zero gate voltage drain current	I_{DSS}	$V_{DS} = -240 \text{ V}, V_{GS} = 0$			-100	μA
Gate to source cutoff voltage	$V_{GS(off)}$	$I_D = -1 \text{ mA}, V_{DS} = -10 \text{ V}$	-2		-4	V
Static Drain to source on state resistance	$R_{DS(on)}$	$I_D = -0.5 \text{ A}, V_{GS} = -10 \text{ V}$		6.0	8.5	Ω
Forward transfer admittance	$ y_{fs} $	$I_D = -0.5 \text{ A}, V_{DS} = -20 \text{ V}$	0.25	0.4		S
Input capacitance	C_{iss}	$V_{DS} = -10 \text{ V}, V_{GS} = 0,$		235		pF
Output capacitance	C_{oss}	$f = 1 \text{ MHz}$		65		pF
Reverse transfer capacitance	C_{rss}			16		pF
Turn-on delay time	$t_{d(on)}$	$I_D = -0.5 \text{ A}, V_{GS} = -10 \text{ V},$		10		ns
Rise time	t_r	$R_L = 60 \text{ } \Omega$		25		ns
Turn-off delay time	$t_{d(off)}$			35		ns
Fall time	t_f			45		ns
Body to drain diode forward voltage	V_{DF}	$I_F = -1 \text{ A}, V_{GS} = 0$		-0.9		V
Body to drain diode reverse recovery time	t_{rr}	$I_F = -1 \text{ A}, V_{GS} = 0, diF/dt = 50 \text{ A}/\mu\text{s}$		200		ns