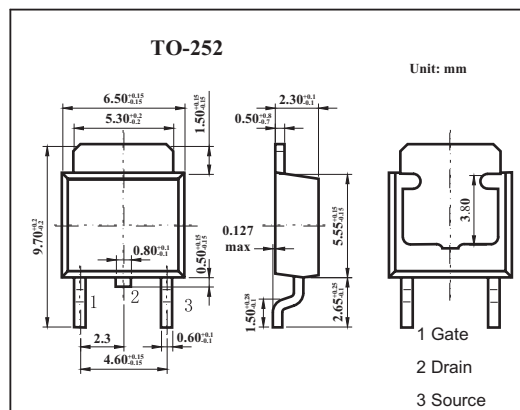
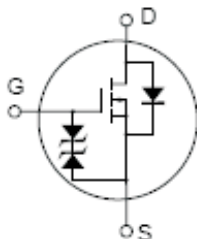


Silicon P-Channel MOSFET

2SJ387S

■ Features

- Low on-resistance
- Low drive current
- 2.5 V Gate drive device can be driven from 3 V Source
- Suitable for Switching regulator, DC - DC converter



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

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DS}	-20	V
Gate to source voltage	V_{GS}	± 10	V
Drain current (DC)	I_D	-10	A
Drain current(pulse) *	I_D	-40	A
Power dissipation	P_D	20	W
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* $PW \leq 10 \mu\text{s}$; $d \leq 1\%$.

2SJ387S

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain to source breakdown voltage	V _{DSS}	I _D =-10mA, V _{GS} =0	-20			V
Gate to source breakdown voltage	V _{GSS}	I _G =±200 μA, V _{DS} =0	±10			V
Drain cut-off current	I _{DSS}	V _{DS} =-16V, V _{GS} =0			-100	μA
Gate leakage current	I _{GSS}	V _{GS} =±6.5V, V _{DS} =0			±10	μA
Gate to source cutoff voltage	V _{GS(off)}	V _{DS} =-10V, I _D =-1mA	-0.5		-1.5	V
Forward transfer admittance	Y _{fs}	V _{DS} =-10V, I _D =-5A	7	12		S
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =-4V, I _D =-5A		0.05	0.07	Ω
		V _{GS} =-2.5V, I _D =-5A		0.07	0.1	Ω
Input capacitance	C _{iss}	V _{DS} =-10V, V _{GS} =0, f=1MHz		1170		pF
Output capacitance	C _{oss}			860		pF
Reverse transfer capacitance	C _{rss}			310		pF
Turn-on delay time	t _{d(on)}	V _{GS(on)} =-4V, I _D =-5A, R _L =2Ω		20		ns
Rise time	t _r			325		ns
Turn-off delay time	t _{d(off)}			350		ns
Fall time	t _f			425		ns
Total Gate Charge	Q _g	V _{GS} =-10V, I _D =-1A, V _{DD} =-48V		6.5		nC
Gate to Source Charge	Q _{gs}			4.5		nC
Gate Drain Charge	Q _{gd}			2.0		nC
Body to drain diode forward voltage	V _{DF}	I _F =-10A, V _{GS} =0		-1.0		V
Body to drain diode reverse recovery time	t _{rr}	I _F =-10A, V _{GS} =0, diF/dt=20A/μs		240		ns