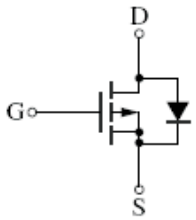
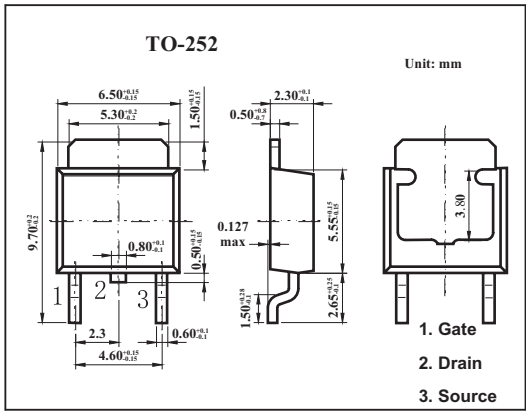
Silicon P-channel power MOSFET

2SJ0582

■ Features

- Avalanche energy capability guaranteed
- High-speed switching
- No secondary breakdown





■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to Source Voltage	V_{DSS}	-200	V
Gate to Source Voltage	V_{GSS}	±20	V
Drain Current	I_D	±2	A
Peak Drain Current	I_{DP}	±4	A
Avalanche Energy Capability *	E_{AS}	10	mJ
Power Dissipation Tc = 25℃	P_D	10	W
Power Dissipation	P_D	1	W
Channel Temperature	Tch	150	℃
Storage Temperature	Tstg	-55 to +150	℃

* L = 5 mH, I_L = 2 A, 1 pulse

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain Cut-off Current	I_{DSS}	V_{DS} = -160 V, V_{GS} = 0			-10	μA
Gate Leakage Current	I_{GSS}	V_{GS} = ±20 V, V_{DS} = 0			±10	μA
Drain-Source Surrender Voltage	V_{DSS}	I_D = -1 mA, V_{GS} = 0	-200			V
Gate Threshold Voltage	V_{th}	V_{DS} = -25 V, I_D = -1 mA	-2		-4	V
Drain to Source On-state Resistance	$R_{DS(on)}$	V_{GS} = -10 V, I_D = -1.0 A		1.5	2.0	Ω
Forward Transfer Admittance	$\|Y_{fs}\|$	V_{DS} = -25 V, I_D = -1.0 A	1	1.7		S
Diode Forward Voltage	V_{DF}	I_{DR} = -2.0 A, V_{GS} = 0			1.4	V
Input Capacitance	C_{iss}	V_{DS} = -20 V, V_{GS} = 0, f = 1 MHz		400		pF
Output Capacitance	C_{oss}			55		pF
Feedback Capacitance	C_{rss}			25		pF
Turn-on Delay Time	$t_{d(on)}$	V_{DD} = 100 V, I_D = -1.0 A, R_L = 100Ω V_{GS} = -10 V		12		ns
Rise Time	t_r			15		ns
Turn-off Delay Time	$t_{d(off)}$			25		ns
Fall Time	t_f			50		ns
Thermal resistance (ch-c)	$R_{th(ch-c)}$				12.5	℃/W
Thermal resistance (ch-a)	$R_{th(ch-a)}$				125	℃/W

■ Marking

Marking	J0582