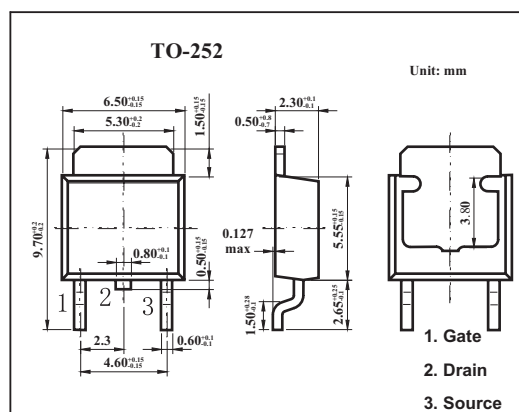
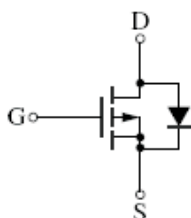


Silicon P-channel power MOSFET

2SJ0582

■ Features

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

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

Parameter	Symbol	Rating	Unit
Drain to Source Voltage	V_{DS}	-200	V
Gate to Source Voltage	V_{GS}	± 20	V
Drain Current	I_D	± 2	A
Peak Drain Current	I_{DP}	± 4	A
Avalanche Energy Capability *	EAS	10	mJ
Power Dissipation $T_c = 25^\circ\text{C}$	P_D	10	W
Power Dissipation	P_D	1	W
Channel Temperature	T_{ch}	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* $L = 5\text{ mH}$, $I_L = 2\text{ A}$, 1 pulse

2SJ0582

■ Electrical Characteristics Ta = 25°C

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

■ Marking

Marking	J0582
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