



2SJ571 — P-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

- Low ON-resistance.
- Ultrahigh-speed switching.
- 10V drive.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		-400	V
Gate-to-Source Voltage	V _{GSS}		±30	V
Drain Current (DC)	I _D		-5	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	-20	A
Allowable Power Dissipation	P _D	Tc=25°C	50	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR) _{DSS}	I _D =-10mA, V _{GS} =0V	-400			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =-320V, V _{GS} =0V			-1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±30V, V _{DS} =0V			±100	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} =-10V, I _D =-1mA	-2.0		-3.0	V
Forward Transfer Admittance	y _{fs}	V _{DS} =-10V, I _D =-2.5A	1.3	2.6		S
Static Drain-to-Source On-State Resistance	R _{DS(on)}	I _D =-2.5A, V _{GS} =10V		1.5	2.0	Ω
Input Capacitance	C _{iss}	V _{DS} =-20V, f=1MHz		1500		pF
Output Capacitance	C _{oss}	V _{DS} =-20V, f=1MHz		240		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =-20V, f=1MHz		90		pF

Continued on next page.

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2SJ571

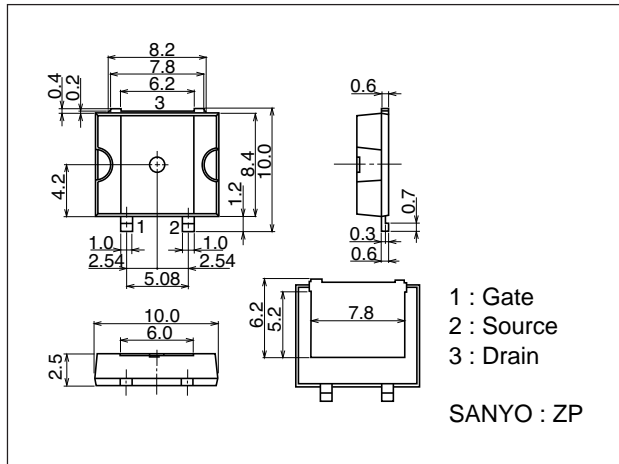
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		25		ns
Rise Time	t_r	See specified Test Circuit.		70		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit.		340		ns
Fall Time	t_f	See specified Test Circuit.		150		ns
Diode Forward Voltage	V_{SD}	$I_S = -5A, V_{GS} = 0V$		-0.84	-1.5	V

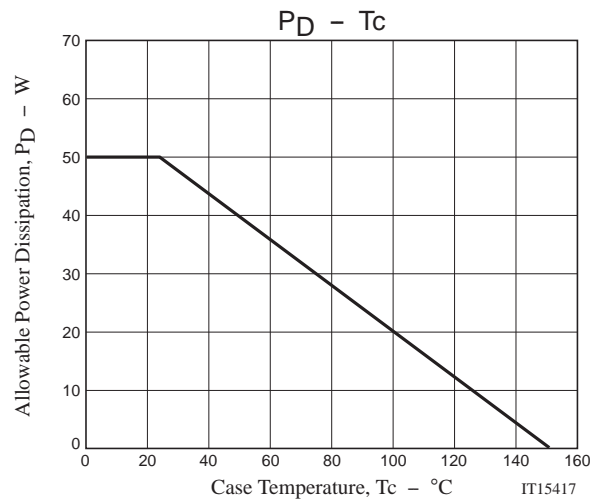
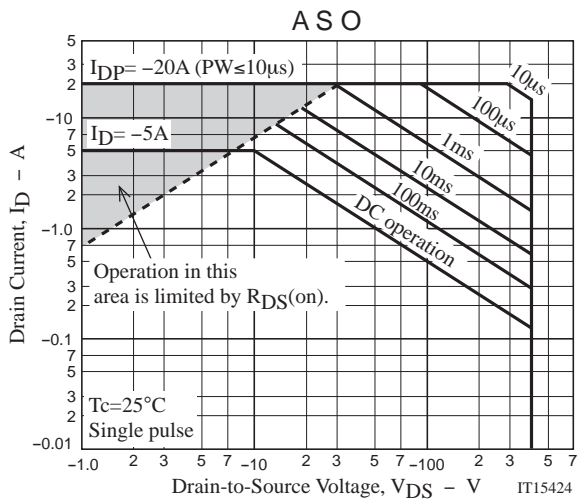
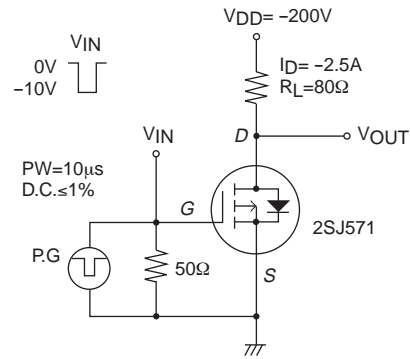
Package Dimensions

unit : mm (typ)

7002-001



Switching Time Test Circuit



Note on usage : Since the 2SJ571 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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