

Ordering number : 000000



N-Channel Silicon MOSFET

FW262

Preliminary

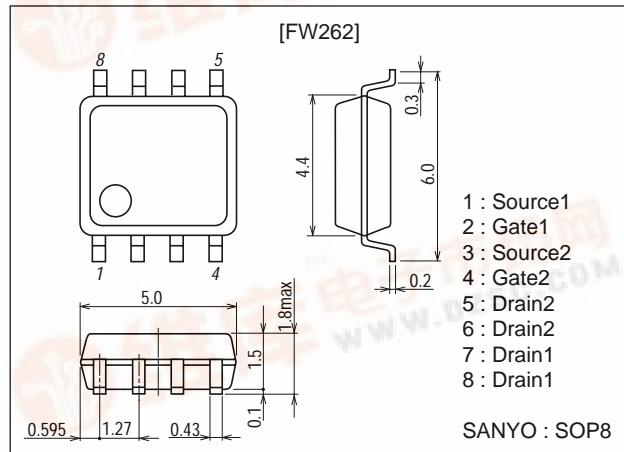
Features

- Low ON-resistance.
- 2.5V drive.

Package Dimensions

unit : mm

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Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings		Unit
Drain-to-Source Voltage	V _{DSS}			30	V
Gate-to-Source Voltage	V _{GSS}			±10	V
Drain Current (DC)	I _D			9	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%		52	A
Allowable Power Dissipation	P _D	Mounted on a ceramic board (1000mm ² ×0.8mm)		1.7	W
Total Dissipation	P _T	Mounted on a ceramic board (1000mm ² ×0.8mm)		2.0	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 =1mA, V _{GS} =0	30			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =30V, V _{GS} =0			1	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±8V, V _{DS} =0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	0.4		1.3	V
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, I _D =9A	19.5	28		S
Static Drain-to-Source On-State Resistance	R _{D5(on)1}	I _D =9A, V _{GS} =4V		12	16	mΩ
	R _{D5(on)2}	I _D =2A, V _{GS} =2.5V		14	20	mΩ

Marking : W262

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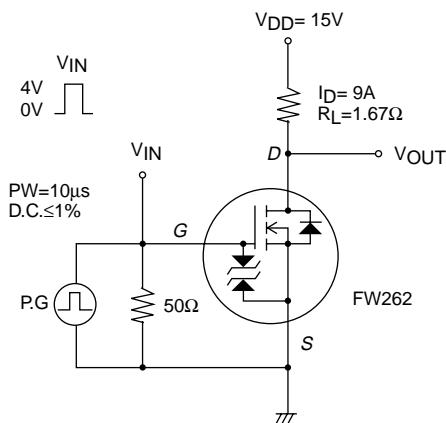
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	C_{iss}	$V_{DS}=10V, f=1MHz$		2350		pF
Output Capacitance	C_{oss}	$V_{DS}=10V, f=1MHz$		390		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10V, f=1MHz$		330		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		25		ns
Rise Time	t_r	See specified Test Circuit		240		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		215		ns
Fall Time	t_f	See specified Test Circuit		295		ns
Total Gate Charge	Q_g	$V_{DS}=10V, V_{GS}=10V, I_D=9A$		72		nC
Gate-to-Source Charge	Q_{gs}	$V_{DS}=10V, V_{GS}=10V, I_D=9A$		5		nC
Gate-to-Drain "Miller" Charge	Q_{gd}	$V_{DS}=10V, V_{GS}=10V, I_D=9A$		7.8		nC
Diode Forward Voltage	V_{SD}	$I_S=9A, V_{GS}=0$		0.82	1.2	V

Switching Time Test Circuit



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