Ordering number : 000000

N-Channel Silicon MOSFET

FW262

SANYO

Preliminary

Features

- Low ON-resistance.
- 2.5V drive.

Package Dimensions

unit : mm

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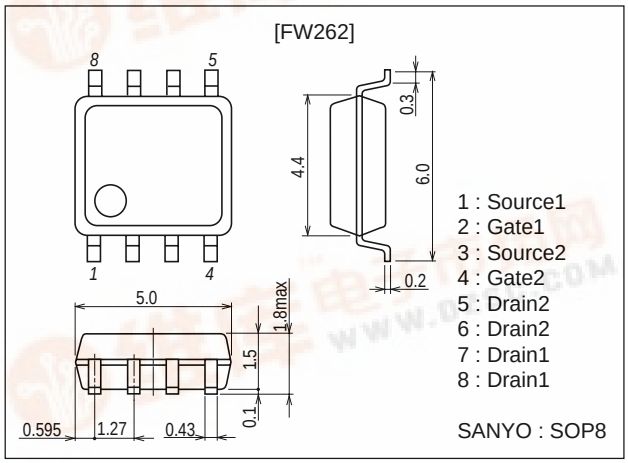

Specifications

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 (1000mm²×0.8mm)	1.7	W
Total Dissipation	P_T	Mounted on a ceramic board (1000mm²×0.8mm)	2.0	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-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	|yfs|	V_{DS}=10V, I_D=9A	19.5	28		S
Static Drain-to-Source On-State Resistance	$R_{DS}(on)1$	I_D=9A, V_{GS}=4V		12	16	mΩ
	$R_{DS}(on)2$	I_D=2A, V_{GS}=2.5V		14	20	mΩ

Marking : W262

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	V_{DS}=10V, f=1MHz		2350		pF
Output Capacitance	Coss	V_{DS}=10V, f=1MHz		390		pF
Reverse Transfer Capacitance	Crss	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	Qg	V_{DS}=10V, V_{GS}=10V, I_{D}=9A		72		nC
Gate-to-Source Charge	Qgs	V_{DS}=10V, V_{GS}=10V, I_{D}=9A		5		nC
Gate-to-Drain “Miller” Charge	Qgd	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