Ordering number:EN5579A

N-Channel Silicon MOSFET

FW211

DC-DC Converter Applications

Features

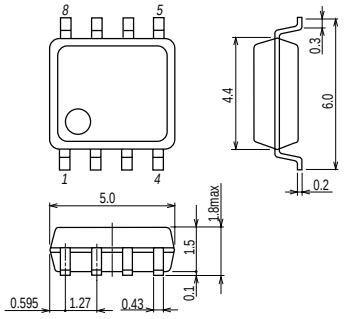
· Low ON resistance.
· 2.5V drive.

Package Dimensions

unit:mm

2129

[FW211]



1:Source 1
2:Gate 1
3:Source 2
4:Gate 2
5:Drain 2
6:Drain 2
7:Drain 1
8:Drain 1

SANYO:SOP8

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		20	V
Gate-to-Source Voltage	V_{GSS}		±10	V
Drain Current (DC)	I_D		6	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) 1unit	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	20			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V, V_{GS}=0			100	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=5A	9	15		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}1$	I_D=5A, V_{GS}=4V		27	35	mΩ
	$R_{DS(on)}2$	I_D=2A, V_{GS}=2.5V		35	48	mΩ
Input Capacitance	Ciss	V_{DS}=10V, f=1MHz		750		pF
Output Capacitance	Coss	V_{DS}=10V, f=1MHz		520		pF
Reverse Transfer Capacitance	Crss	V_{DS}=10V, f=1MHz		300		pF
Turn-ON Delay Time	$t_{d(on)}$	See Specified Test Circuit		20		ns
Rise Time	t_r	See Specified Test Circuit		200		ns
Turn-OFF Delay Time	$t_{d(off)}$	See Specified Test Circuit		150		ns
Fall Time	t_f	See Specified Test Circuit		150		ns
Total Gate Charge	Qg	V_{DS}=10V, V_{GS}=10V, I_D=1A		30		nC
Gate-to-Source Charge	Qgs			5		nC
Gate-to-Drain "Miller" Charge	Qgd			7		nC
Diode Forward Voltage	V_{SD}	I_S=5A, V_{GS}=0		1.0	1.2	V

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Switching Time Test Circuit