Ordering number:EN4632

FP401

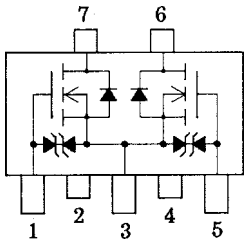
N-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- Composite type with 2 low-voltage-drive N-channel MOSFETs facilitating high-density mounting.

Electrical Connection



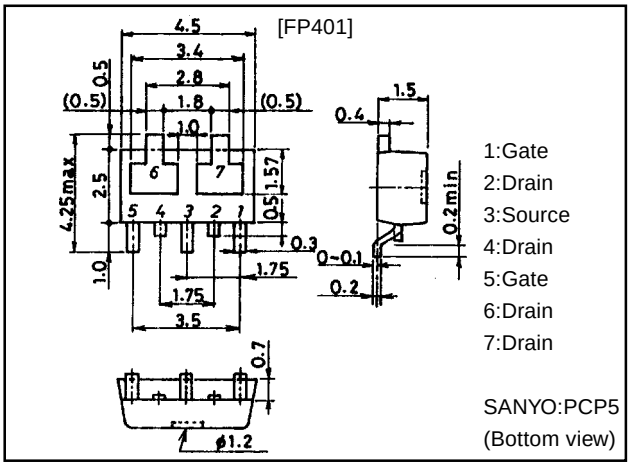
1:Gate
2:Drain
3:Source
4:Drain
5:Gate
6:Drain
7:Drain

(Top view)

Package Dimensions

unit:mm

2102A



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

SANYO:PCP5

(Bottom view)

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		250	V
Gate-to-Source Voltage	V_{GSS}		±20	V
Drain Current (DC)	I_D		400	mA
Drain Current (Pulse)	I_{DP}	PW≤10μs, duty cycle ≤1%	1.6	A
Allowable Power Dissipation	P_D	Tc=25˚C, 1 unit	2.0	W
	P_D	Mounted on ceramic board (250mm²×0.8mm) 1 unit	0.8	W
Total Power Dissipation	P_T	Mounted on ceramic board (250mm²×0.8mm)	1.1	W
Channel Temperature	Tch		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta=25˚C

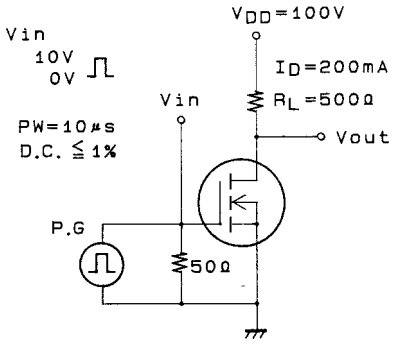
Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
D-S Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0	250			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=250V, V_{GS}=0			100	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±18V, V_{DS}=0			±10	μA
Cutoff Voltage	$V_{GS(off)}$	V_{DS}=10V, I_D=1mA	1.5		2.5	V
Forward Transfer Admittance	| Yfs |	V_{DS}=10V, I_D=200mA	270	400		mS
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	I_D=200mA, V_{GS}=10V		8	12	Ω
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		37		pF
Output Capacitance	Coss	V_{DS}=20V, f=1MHz		10		pF
Reverse Transfer Capacitance	Crss	V_{DS}=20V, f=1MHz		4		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		10		ns
Rise Time	t_r	See specified Test Circuit		10		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		35		ns
Fall Time	t_f	See specified Test Circuit		45		ns
Diode Forward Voltage	V_{SD}	I_S=400mA, V_{GS}=0		1.0		V

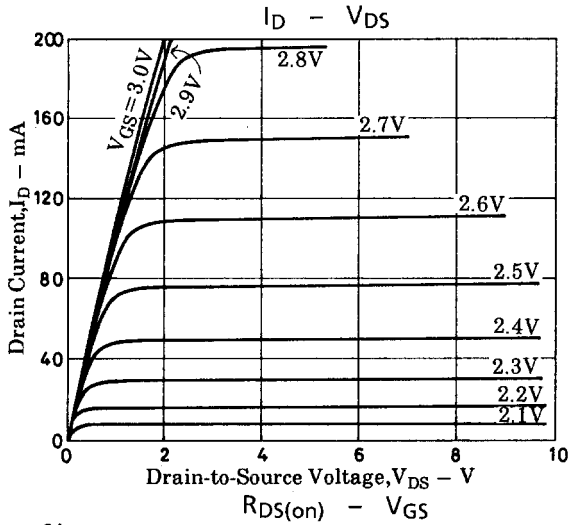
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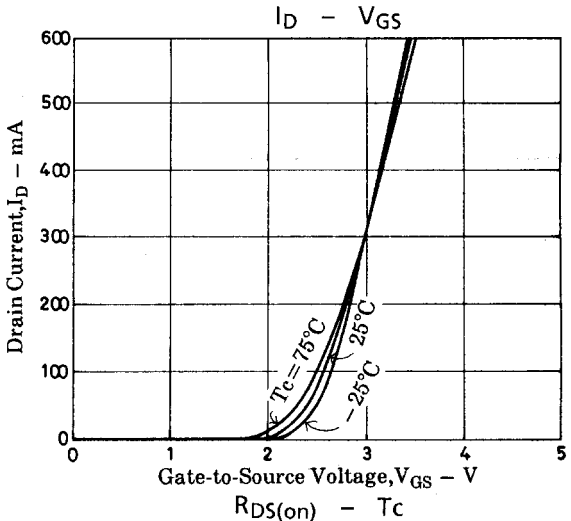
SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

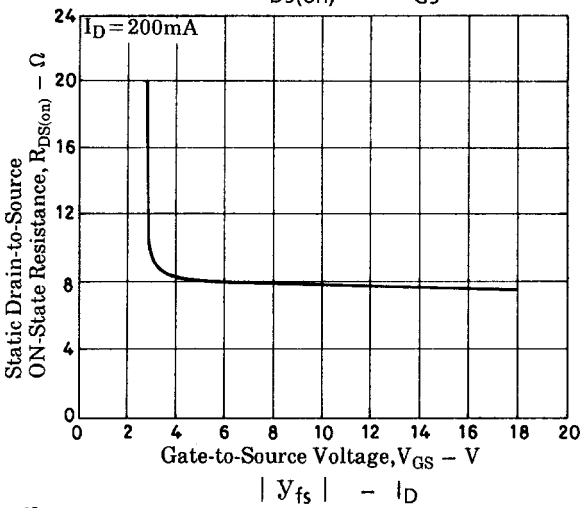
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

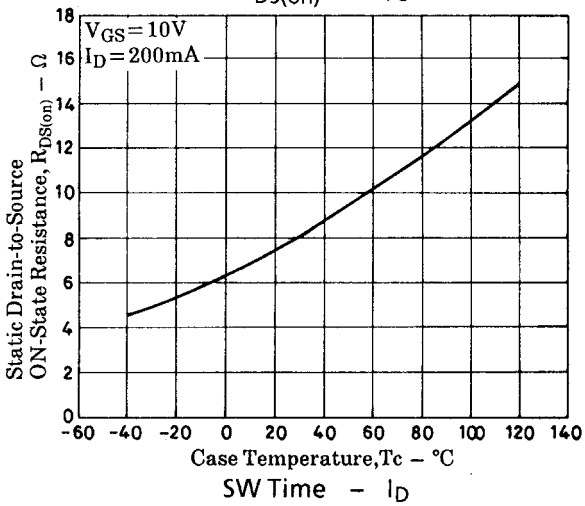
Switching Time Test Circuit

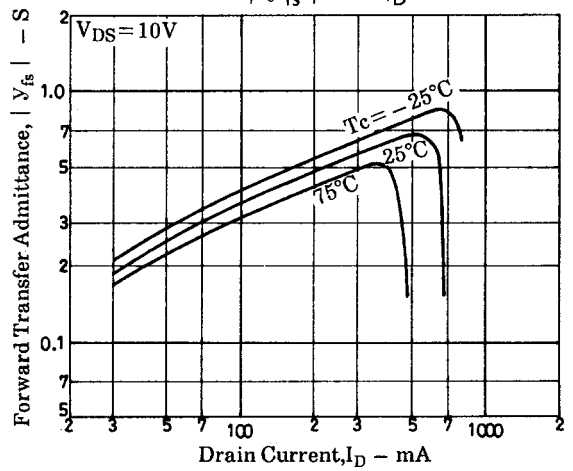


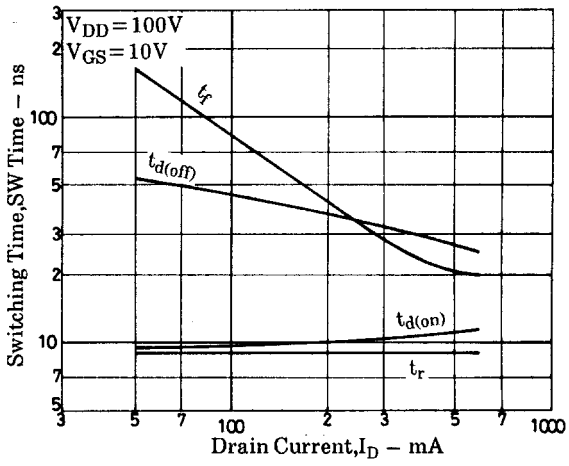


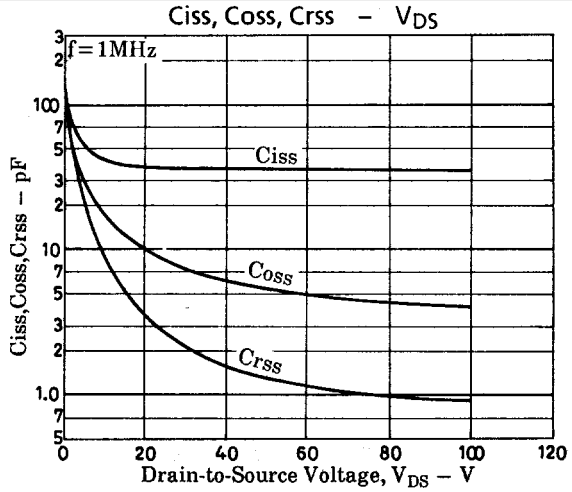


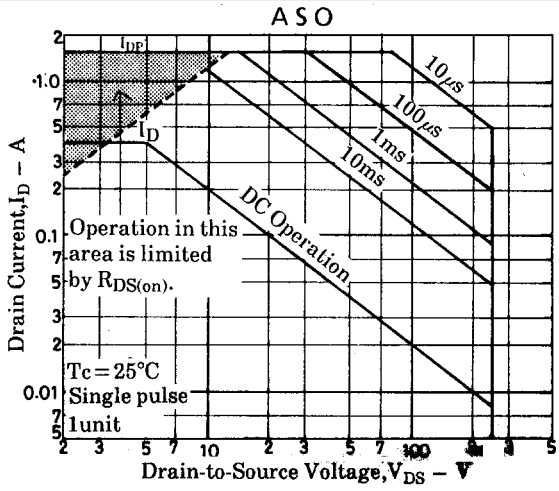


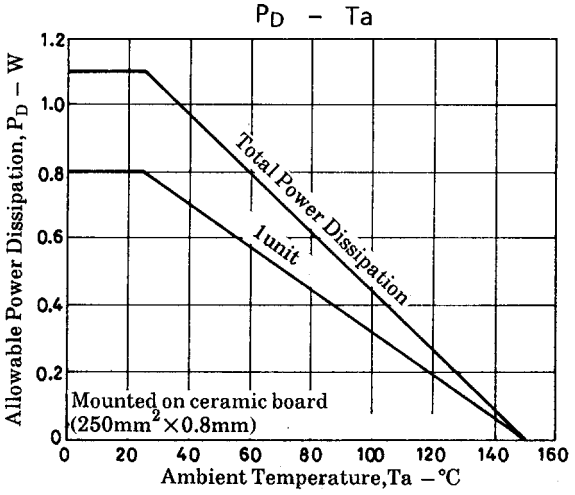


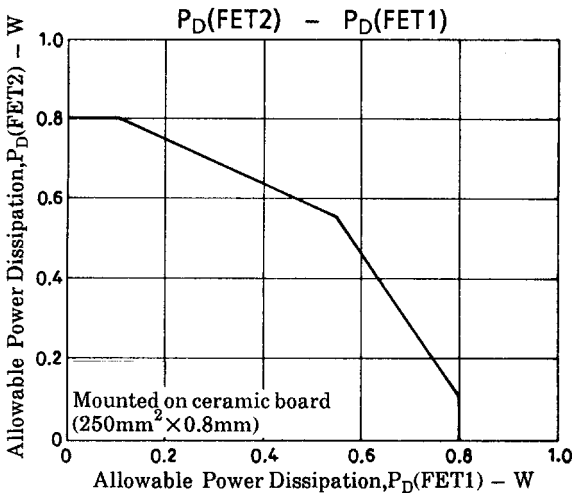












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