CPH3410

N- Channel Silicon MOS FET
Very High-Speed Switching Applications

TENTATIVE

Features and Applications

- Low ON-state resistance.
- Very high-speed switching.
- 2.5V drive.

Absolute Maximum Ratings / Ta=25°C

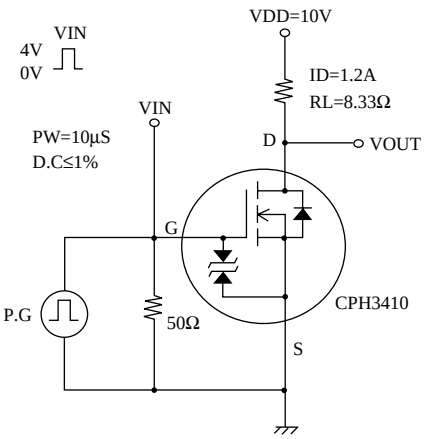
				unit
Drain to Source Voltage	VDSS		20	V
Gate to Source Voltage	VGSS		±10	V
Drain Current (DC)	ID		2.5	A
Drain Current (Pulse)	IDP	PW≤10μs, duty cycle≤1%	10	A
Allowable power Dissipation	PD	Mounted on ceramic board(900mm^2 × 0.8mm)1unit	1	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		−55 to +150	°C

Electrical Characteristics / Ta=25°C

			min	typ	max	unit
Drain to Source Breakdown Voltage	V(BR)DSS	ID=1mA , VGS=0	20			V
Zero Gate Voltage Drain Current	IDSS	VDS=20V , VGS=0			10	μA
Gate to Source Leakage Current	IGSS	VGS=±8V , VDS=0			±10	μA
Cutoff Voltage	VGS(off)	VDS=10V , ID=1mA	0.5		1.3	V
Forward Transfer Admittance	| yfs |	VDS=10V , ID=1.2A	2.8	4		S
Static Drain to Source on State Resistance	RDS(on) 1	ID=1.2A , VGS=4V		80	105	mΩ
	RDS(on) 2	ID=0.6A , VGS=2.5V		110	155	mΩ
Input Capacitance	Ciss	VDS=10V , f=1MHz		200		pF
Output Capacitance	Coss	VDS=10V , f=1MHz		70		pF
Reverse Transfer Capacitance	Crss	VDS=10V , f=1MHz		45		pF
Turn-ON Delay Time	td(on)	See specified Test Circuit		8		ns
Rise Time	tr	〃		30		ns
Turn-oFF Delay Time	td(off)	〃		28		ns
Fall Time	tf	〃		42		ns
Total Gate Charge	Qg	VDS=10V, VGS=10V, ID=2.5A		7		nC
Gate Source Charge	Qgs			0.5		nC
Gate Drain Charge	Qgd			1		nC
Diode Forward Voltage	VSD	IS=2.5A , VGS= 0		0.85	1.2	V

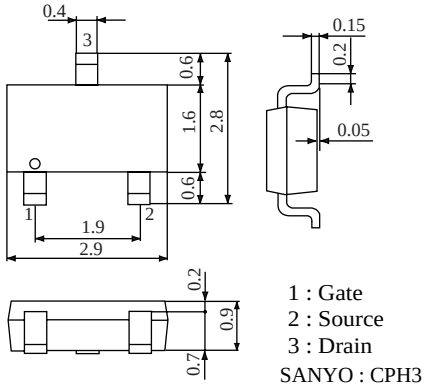
Marking :

Switching Time Test Circuit



Package Dimensions

(unit:mm)



1 : Gate
2 : Source
3 : Drain
SANYO : CPH3

Specifications and information herin are subject to change without notice.

SANYO Electric Co., Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10,1 Chome, Ueno, taito-ku, 110 JAPAN