

## TENTATIVE

## Features and Applications

- Low ON-state resistance.
  - Very high-speed switching.
  - Low-voltage drive.

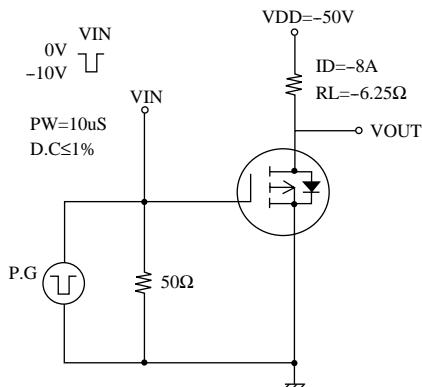
### Absolute Maximum Ratings / Ta=25°C

Absolute Maximum Ratings, TA = 25°C			unit
Drain to Source Voltage	VDSS		-100
Gate to Source Voltage	VGSS		±15
Drain Current (D.C)	ID		-15
Drain Current (Pulse)	IDP	PW≤10μS, dutycycle≤1%	-60
Allowable power Dissipation	PD	Tc=25°C	70
Channel Temperature	Tch		150
Storage Temperature	Tstg		-55 to +150

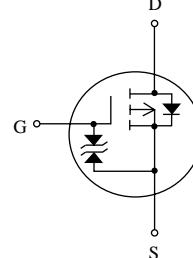
### Electrical Characteristics / Ta=25°C

Drain to Source Breakdown Voltage	V(BR)DSS	ID=-1mA , VGS=0	-100	V	
Gate to Source Breakdown Voltage	V(BR)GSS	ID=±100µA , VGS=0	±15	V	
Zero Gate Voltage Drain Current	IDSS	VDS=-100V , VGS=0	-100	µA	
Gate to Source Leakage Current	IGSS	VGS=±12V , VDS=0	±10	µA	
Cutoff Voltage	VGS(OFF)	VDS=-10V , ID=-1mA	-1.0	-2.0	V
Forward Transfer Admittance	yfs	VDS=-10V , ID=-8A	7.5	13	S
Static Drain to Source on State Resistance	RDS(On)1	ID=-8A , VGS=-10V	0.12	0.16	Ω
	RDS(On)1	ID=-8A , VGS=-4V	0.16	0.22	Ω
Input Capacitance	Ciss	VDS=-20V , f=1MHz	1900	pF	
Output Capacitance	Coss	VDS=-20V , f=1MHz	400	pF	
Reverse Transfer Capacitance	Crss	VDS=-20V , f=1MHz	80	pF	
Turn-ON Delay Time	td(On)	See Specified Test Circuit .	18	ns	
Rise Time	tr		25	ns	
Turn-off Delay Time	td(Off)		300	ns	
Fall Time	tf		120	ns	
Diode Forward Voltage	VSD	IS =-15A , VGS = 0	-1.0	-1.5	V

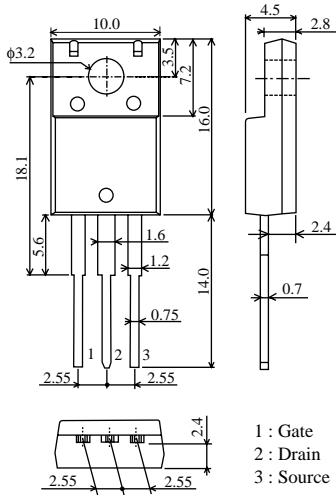
## Switching Time Test Circuit



## Electrical Connection



## Case Outline TO-220 (unit:mm)



Specifications and information herein 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