

No.3467

2SK1464

1.8

N-Channel MOS Silicon FET

Very High-Speed Switching Applications

## Features

- · Low ON-state resistance.
- · Very high-speed switching.
- · Converters.

Absolute Maximum Ratings at Ta = 25°C			unit			
Drain to Source Voltage	$V_{\rm DSS}$			900	V	
	$V_{GSS}$		:	$\pm 30$	V	
·	$I_{\mathbf{D}}$			8	A	
Drain Current(Pulse)	$I_{DP}$	$PW \leq 10 \mu s$ , duty cycle $\leq 1\%$		16	Α	
Allowable Power Dissipation	$P_{D}$	$Tc = 25^{\circ}C$		80	W	
				3.0	W	
	Tch			150	°C	
Storage Temperature	Tstg		-55  to  +150 °C			
Electrical Characteristics at Ta=	=25°C		min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	$I_D = 1 \text{mA}, V_{GS} = 0$	900			v
Zero Gate Voltage Drain Curren	$_{ m IDSS}$	$V_{DS} = 900V, V_{GS} = 0$			1.0	mÅ
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 30V, V_{DS} = 0$			±100	nА
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V_1I_D = 1mA$	2.0		3.0	V
Forward Transfer Admittance	ly <sub>fs</sub> i	$V_{DS} = 20V, I_{D} = 4A$	2.5	5.0		Ś
Static Drain to Source	$R_{DS(on)}$	$I_{D} = 4A, V_{GS} = 10V$		1.2	1.6	$\widetilde{\Omega}$
on State Resistance	20(011)	b , db			1.0	42
Input Capacitance	Ciss	$V_{DS} = 20V_f = 1MHz$		1600		рF
Output Capacitance	Coss	$V_{DS} = 20V, f = 1MHz$		500		рF
Reverse Transfer Capacitance	Crss	$V_{DS} = 20V_{f} = 1MHz$		350		рF
Turn-ON Delay Time	$t_{d(on)}$	- DG		20		ns
Rise Time	$\mathbf{t_r}$	$I_{D} = 4A, V_{GS} = 10V$		80		-
Turn-OFF Delay Time	$t_{d(off)}$	$V_{DD} = 200V, R_{GS} = 50\Omega$		350		ns
Fall Time	t <sub>f</sub>	1 DD - 200 + ,1 GS - 004				ns
Diodo Forward Valtors	VI NY	T 04.77 0		150		ns

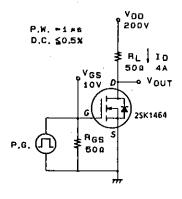
(Note) Be careful in handling the 2SK1464 because it has no protection diode between gate and source.

 $I_S = 8A, V_{GS} = 0$ 

 $\bar{\mathrm{V}}_{\mathrm{SD}}$ 

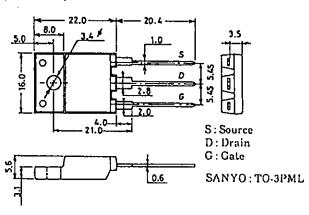
## Switching Time Test Circuit

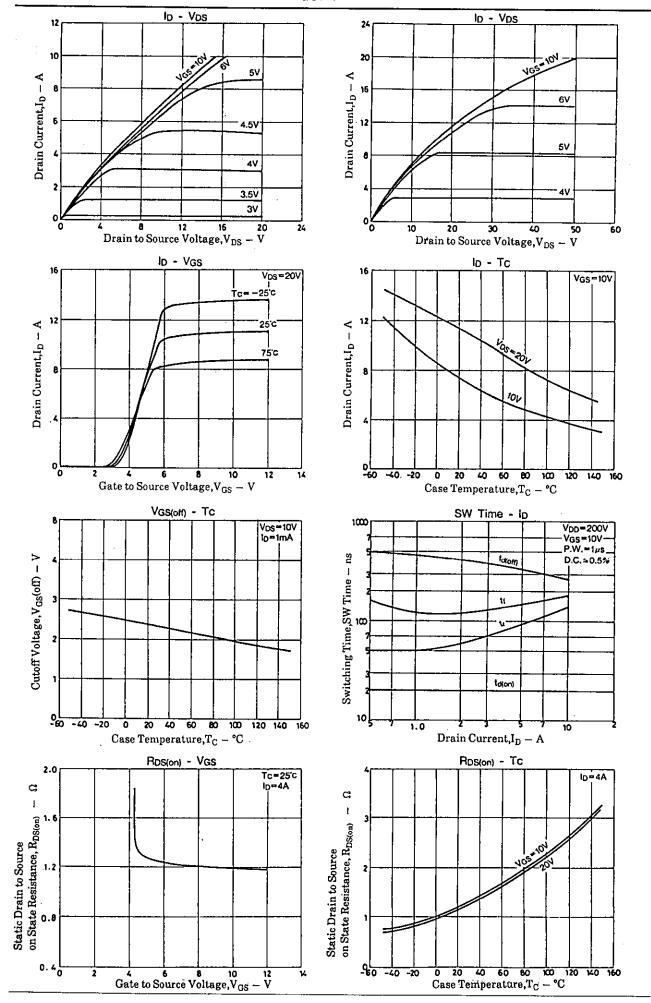
Diode Forward Voltage

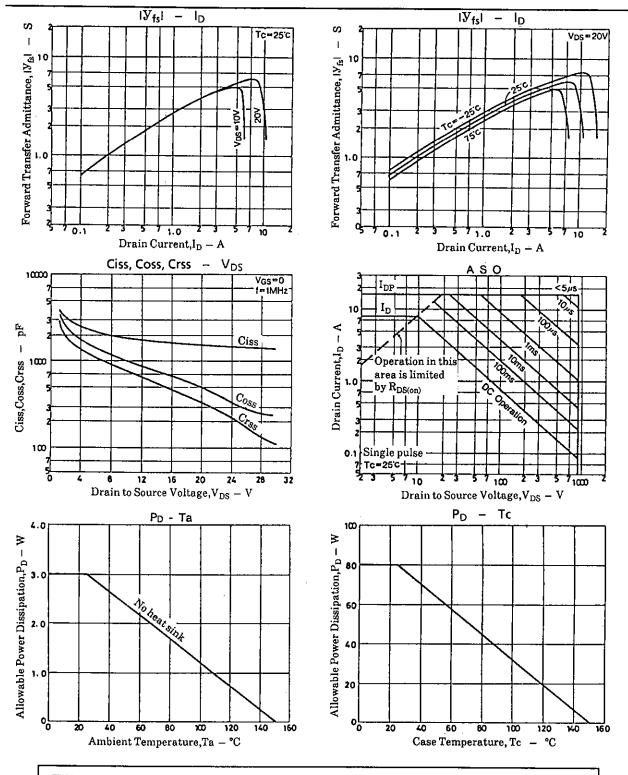


## Package Dimensions 2076

(unit:mm)







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