



No.3463A

**2SK1460**

N-Channel Silicon MOSFET

Ultrahigh-Speed  
Switching Applications**Features**

- Low ON-state resistance.
- Ultrahigh-speed switching.
- Micaless package facilitating mounting.

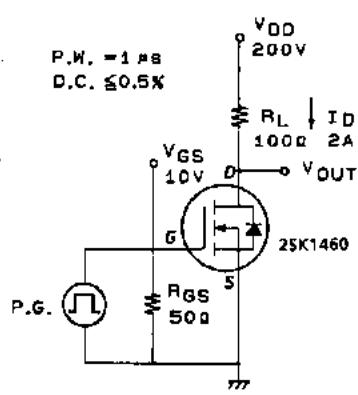
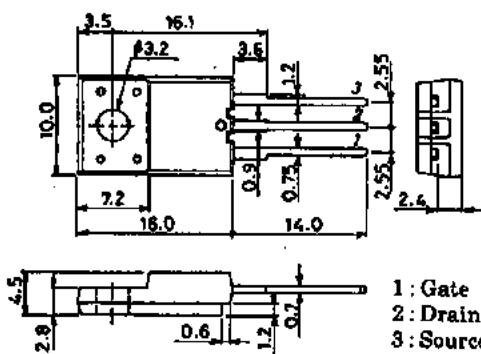
**Absolute Maximum Ratings at Ta = 25°C**

			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	900	V
Gate-to-Source Voltage	V <sub>GSS</sub>	±30	V
Drain Current(DC)	I <sub>D</sub>	3.5	A
Drain Current(Pulse)	I <sub>DP</sub>	PW ≤ 10μs, duty cycle ≤ 1%	A
Allowable Power Dissipation	P <sub>D</sub>	7	A
		2.0	W
Channel Temperature	T <sub>ch</sub>	40	W
Storage Temperature	T <sub>stg</sub>	150	°C
		-55 to +150	°C

**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = 1mA, V <sub>GS</sub> = 0	900			V
Zero-Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 900V, V <sub>GS</sub> = 0			1.0	mA
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±30V, V <sub>DS</sub> = 0			±100	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1mA	2.0		3.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 20V, I <sub>D</sub> = 2A	1.0	2.0		S
Static Drain-to-Source	R <sub>DS(on)</sub>	I <sub>D</sub> = 2A, V <sub>GS</sub> = 10V		2.8	3.6	Ω
ON-State Resistance						
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 20V, f = 1MHz	700			pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 20V, f = 1MHz	300			pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 20V, f = 1MHz	170			pF
Turn-ON Delay Time	t <sub>d(on)</sub>		15			ns
Rise Time	t <sub>r</sub>	I <sub>D</sub> = 2A, V <sub>GS</sub> = 10V	35			ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	V <sub>DD</sub> = 200V, R <sub>GS</sub> = 50Ω	200			ns
Fall Time	t <sub>f</sub>		65			ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = 3.5A, V <sub>GS</sub> = 0			1.8	V

(Note) Be careful in handling the 2SK1460 because it has no protection diode between gate and source.

**Switching Time Test Circuit****Package Dimensions 2078B**  
(unit : mm)

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