

No.3465

**2SK1462****SANYO**

N-Channel MOS Silicon FET

Very High-Speed Switching Applications

**Features**

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

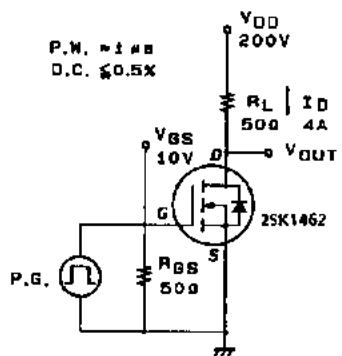
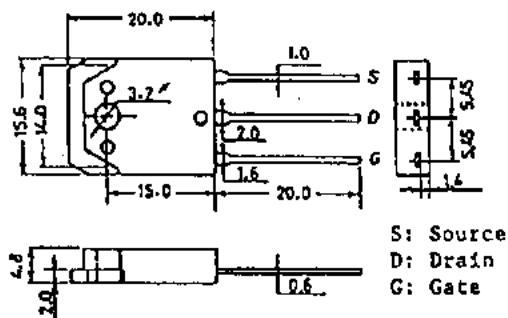
**Absolute Maximum Ratings at Ta=25°C**

			unit
Drain to Source Voltage	V <sub>DSS</sub>	900	V
Gate to Source Voltage	V <sub>GSS</sub>	±30	V
Drain Current(DC)	I <sub>D</sub>	8	A
Drain Current(Pulse)	I <sub>DP</sub>	PW≤10μs, duty cycle≤1%	A
Allowable Power Dissipation	P <sub>D</sub>	T <sub>c</sub> =25°C	W
			2.5 W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	−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	V <sub>fs</sub>	V <sub>DS</sub> =20V, I <sub>D</sub> =4A	2.5	5.0		S
Static Drain to Source on State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> =4A, V <sub>GS</sub> =10V		1.2	1.6	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =20V, f=1MHz	1600			pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> =20V, f=1MHz	500			pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> =20V, f=1MHz	350			pF
Turn-ON Delay Time	t <sub>d(on)</sub>			20		ns
Rise Time	t <sub>r</sub>	I <sub>D</sub> =4A, V <sub>GS</sub> =10V		80		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	V <sub>DD</sub> =200V, R <sub>GS</sub> =50Ω		350		ns
Fall Time	t <sub>f</sub>			150		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> =8A, V <sub>GS</sub> =0			1.8	V

(Note) Be careful in handling the 2SK1462 because it has no protection diode between gate and source.

**Switching Time Test Circuit****Package Dimensions 2056**  
(unit: mm)

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