

No.3465

2SK1462

N-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

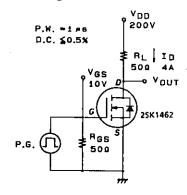
- \cdot Low ON-state resistance.
- · Very high-speed switching.
- · Converters.

Absolute Maximum Ratings at 1	$\Gamma a = 25^{\circ}C$				unit	
Drain to Source Voltage	V_{DSS}		90	0	V	
Gate to Source Voltage	V_{GSS}		±3	0	V	
Drain Current(DC)	I_D			8	Α	
Drain Current(Pulse)	I_{DP}	$PW \leq 10 \mu s$, duty cycle $\leq 1\%$	1	6	A	
Allowable Power Dissipation	P_{D}	Tc = 25°C	15	0	W	
			2.	5	W	
Channel Temperature	Tch		15	0	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg		-55 to +15	0	$^{\circ}\mathrm{C}$	
Electrical Characteristics at Ta = 25°C			min t	ур	max	
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1 \text{mA}, V_{GS} = 0$	900			

Electrical Characteristics at Ta = 25°C			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1 \text{mA}, V_{GS} = 0$	900			V
Zero Gate Voltage Drain Current	$I_{ m DSS}$	$\vec{V}_{DS} = 900\vec{V}, \vec{V}_{GS} = 0$			1.0	mA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 30V$, $V_{DS} = 0$			± 100	nΑ
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	2.0		3.0	v
Forward Transfer Admittance	$ \mathcal{Y}_{fs} $	$V_{DS} = 20V, I_D = 4A$	2.5	5.0		S
Static Drain to Source	$R_{DS(on)}$	$I_D = 4A, V_{GS} = 10V$		1.2	1.6	Ω
Lon State Resistance						
Input Capacitance	Ciss	$V_{DS} = 20V, f = 1MHz$		1600		рF
Output Capacitance	Coss	$V_{\rm DS} = 20V, f = 1MHz$		500		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = 20V, f = 1MHz$		350		pF
Turn-ON Delay Time	$\mathbf{t_{d(on)}}$	r		20		ns
	t_r	$I_D = 4A, V_{GS} = 10V$		80		ns
Turn-OFF Delay Time	${ m t_{d(off)}}$	$V_{DD} = 200V, R_{GS} = 50\Omega$		350		ns
Fall Time	t_f			150		ns
Diode Forward Voltage	v_{SD}	$I_S = 8A, V_{GS} = 0$			1.8	V
Turn-ON Delay Time Rise Time Turn-OFF Delay Time Fall Time	$t_{ m d(on)} \ t_{ m r} \ t_{ m d(off)} \ t_{ m f}$	$\begin{bmatrix} I_{D} = 4A, V_{GS} = 10V \\ V_{DD} = 200V, R_{GS} = 50\Omega \end{bmatrix}$		20 80 350	1.8	ns ns ns

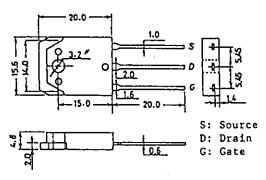
(Note) Be careful in handling the 2SK1462 because it has no protection diode between gate and source.

Switching Time Test Circuit

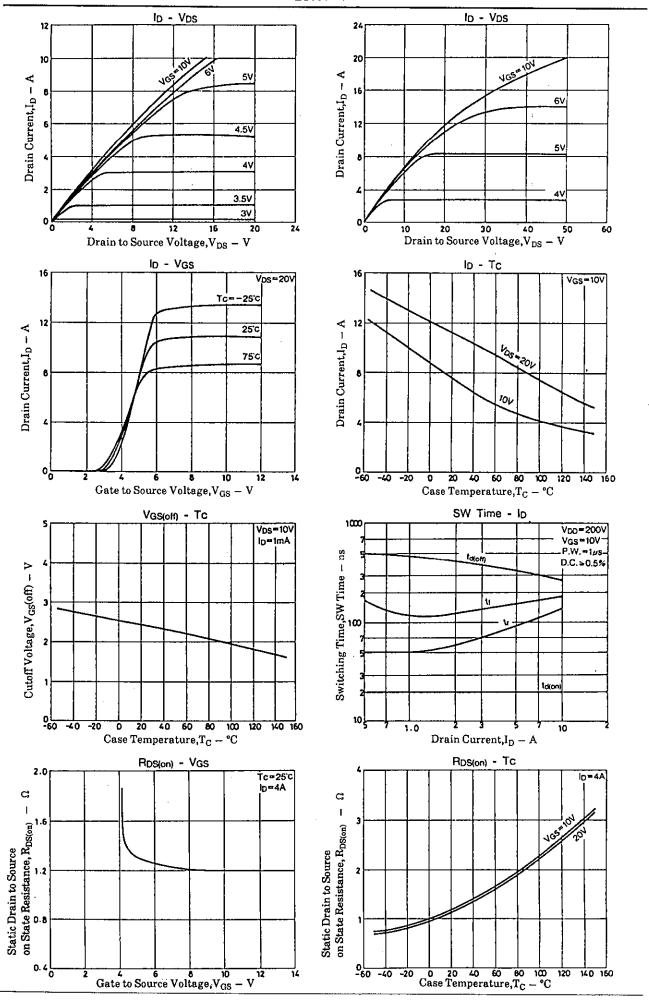


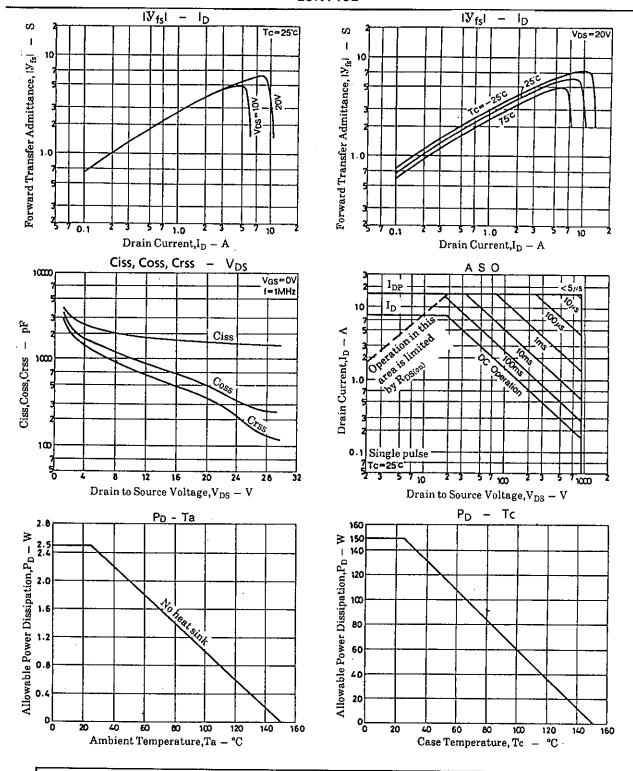
Package Dimensions 2056

(unit: mm)



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