



No.3463A

2SK1460

N-Channel Silicon MOSFET

Ultrahigh-Speed
Switching Applications**Features**

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

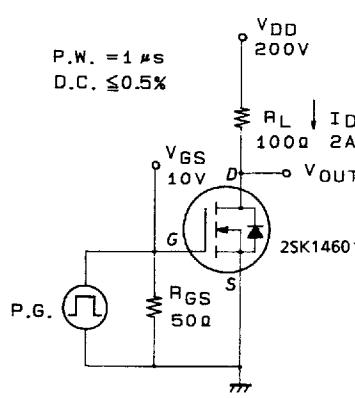
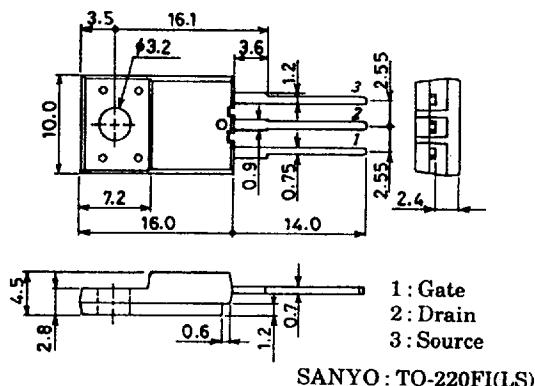
Absolute Maximum Ratings at Ta=25°C

			unit
Drain-to-Source Voltage	V _{DSS}	900	V
Gate-to-Source Voltage	V _{GSS}	±30	V
Drain Current(DC)	I _D	3.5	A
Drain Current(Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	7 A
Allowable Power Dissipation	P _D		2.0 W
		T _c =25°C	40 W
Channel Temperature	T _{ch}		150 °C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

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

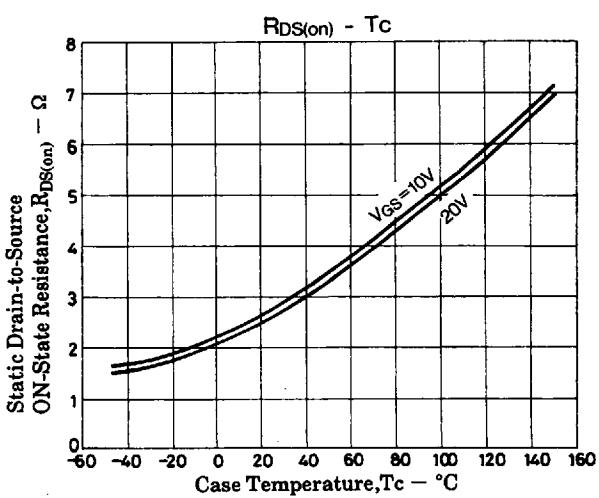
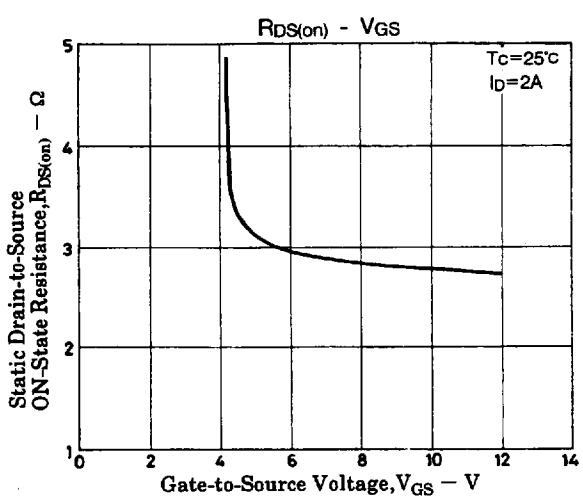
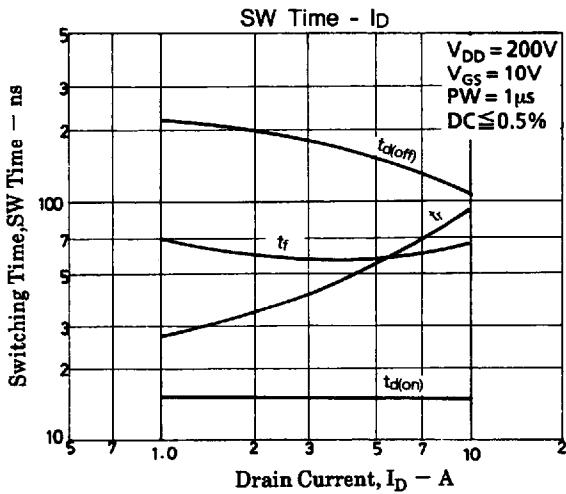
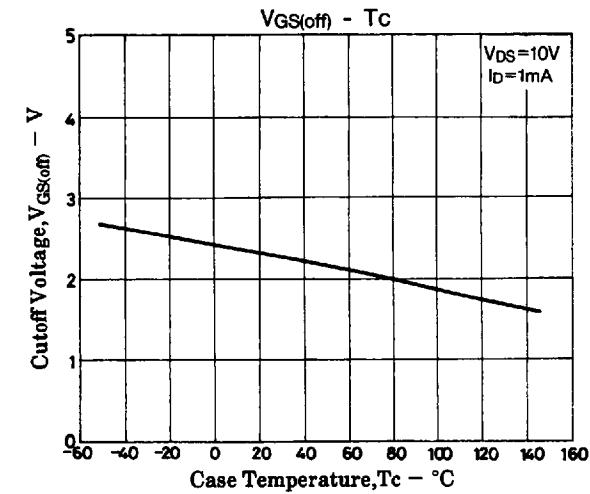
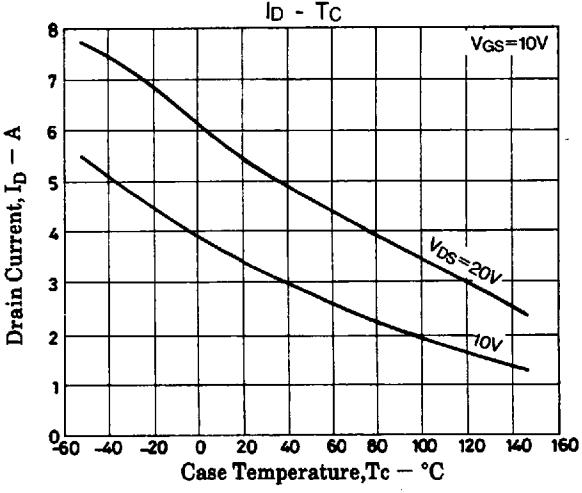
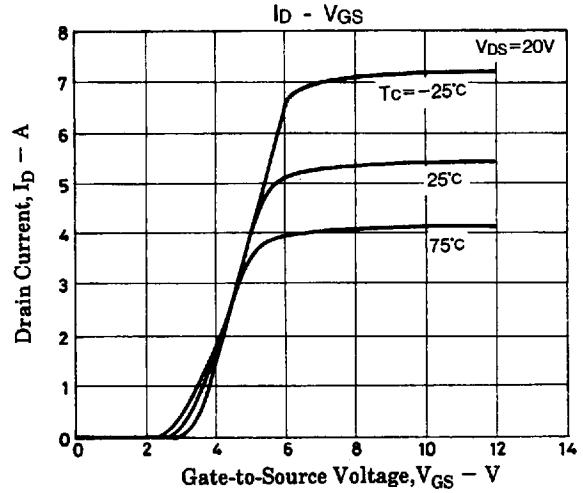
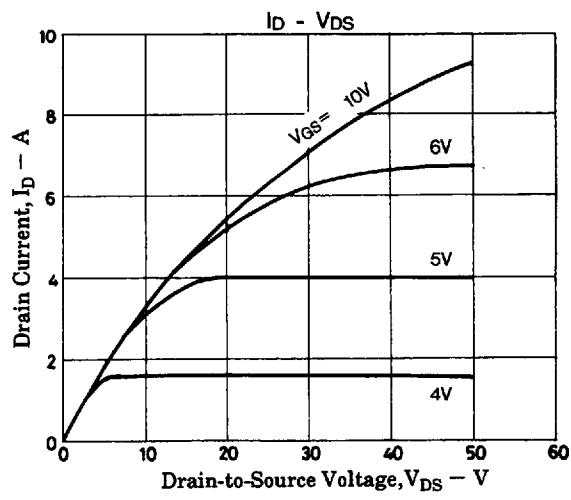
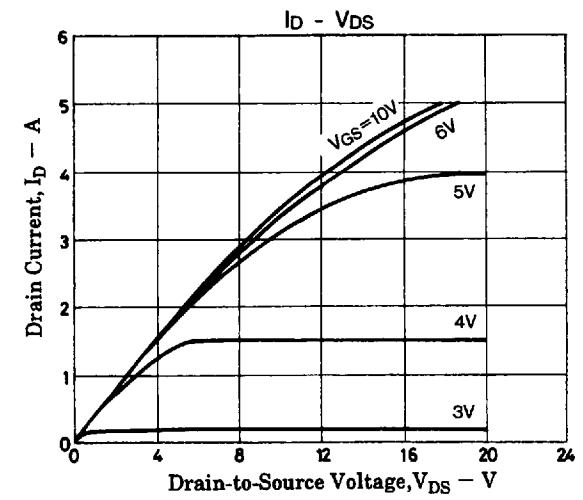
(Note) Be careful in handling the 2SK1460 because it has no protection diode between gate and source.

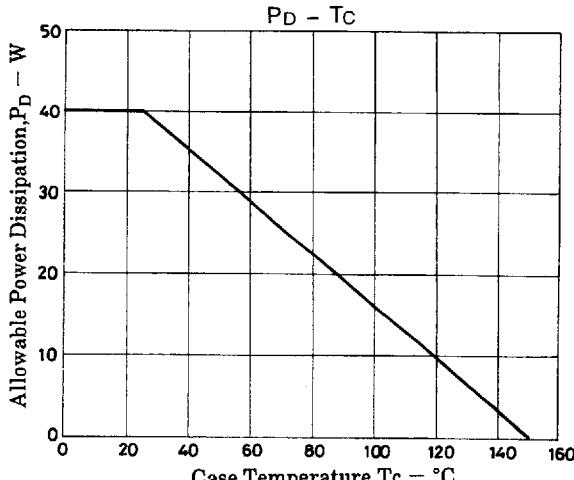
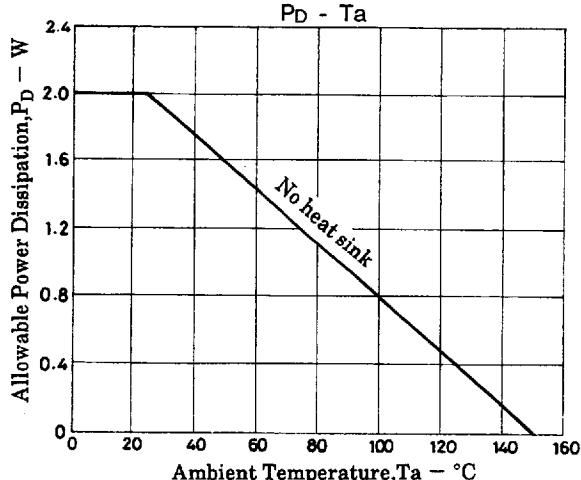
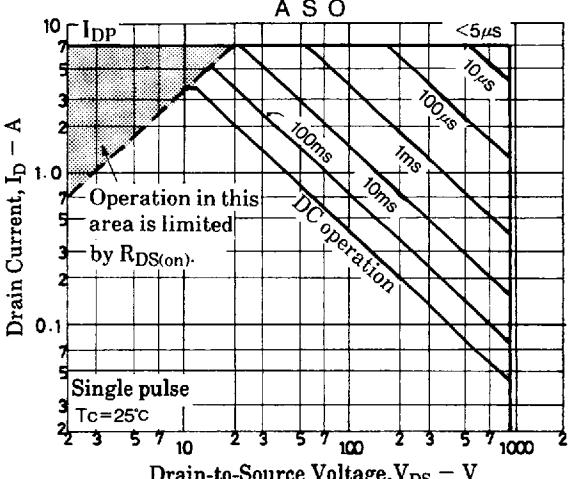
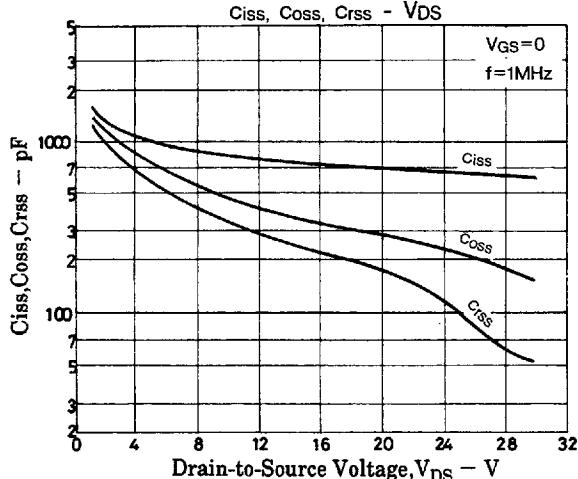
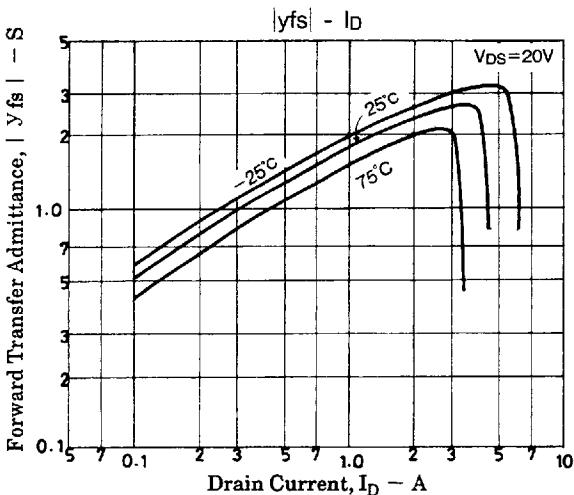
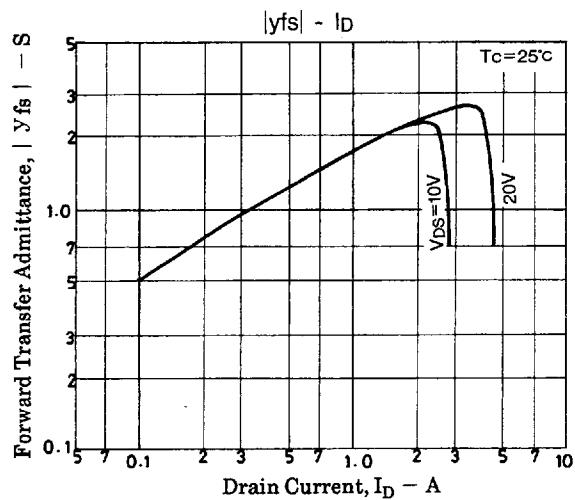
Switching Time Test Circuit**Package Dimensions 2078B**
(unit : mm)

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2SK1460





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