

SANYO	No.3447C	2SK1444
		N-Channel Silicon MOSFET
		Ultrahigh-Speed Switching Applications

Features

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

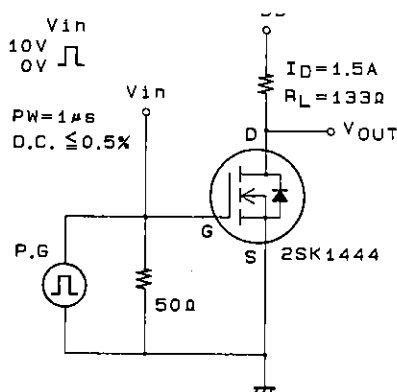
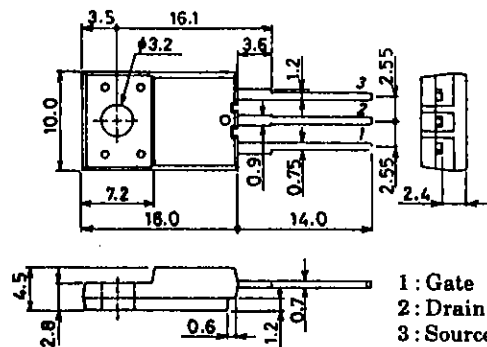
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain-to-Source Voltage	V _{DSS}	450	V
Gate-to-Source Voltage	V _{GSS}	±30	V
Drain Current(DC)	I _D	3	A
Drain Current(Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	12 A
Allowable Power Dissipation	P _D	2.0	W
		T _c = 25°C	25 W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

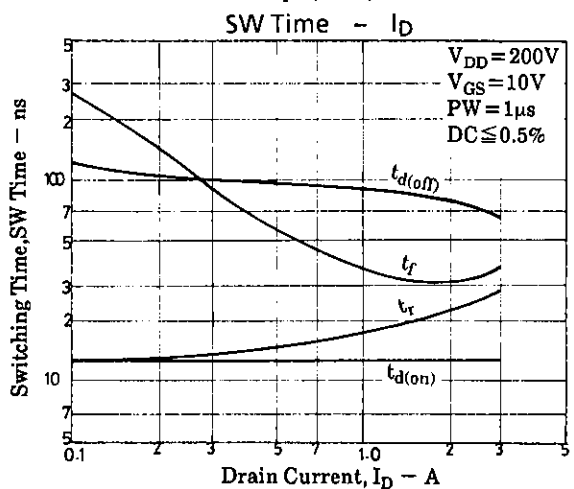
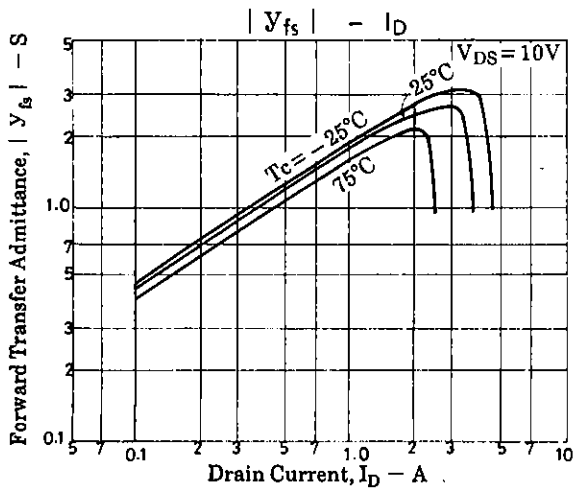
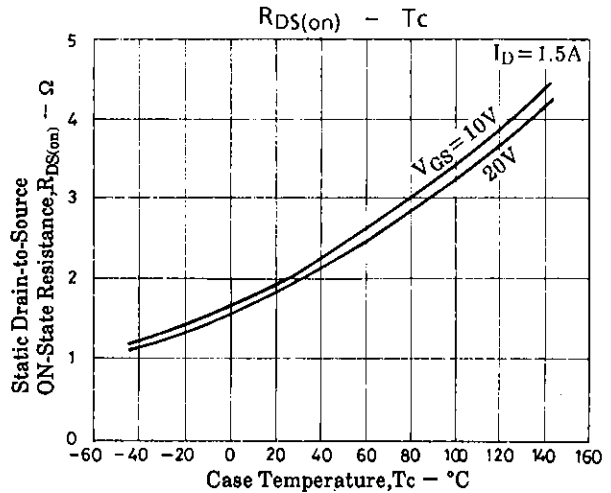
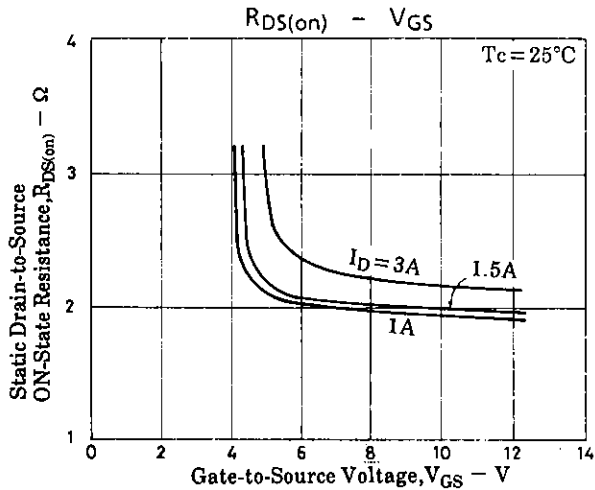
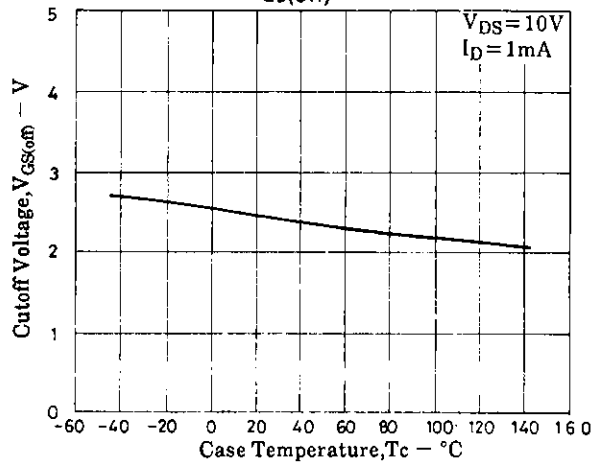
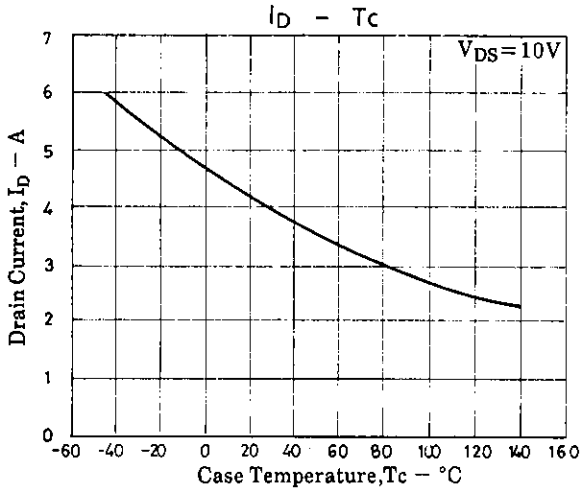
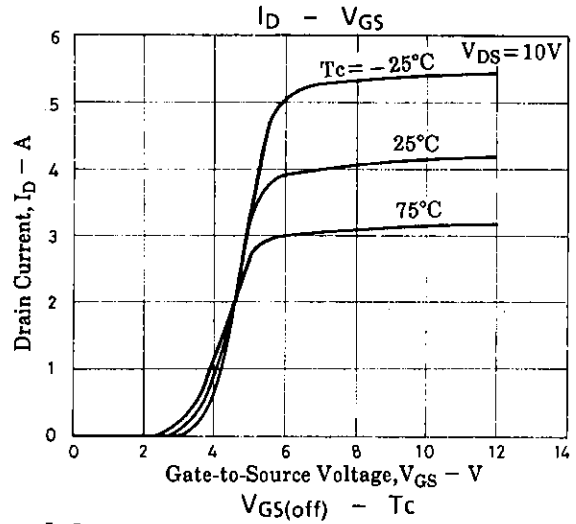
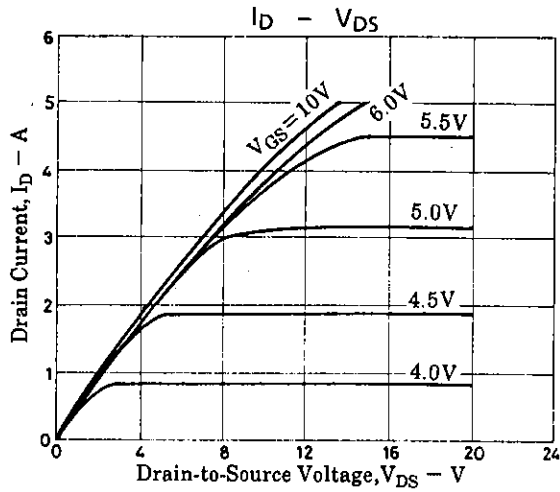
			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	450			V
Zero-Gate Voltage	I _{DSS}	V _{DS} = 450V, V _{GS} = 0			1.0	mA
Drain Current						
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±30V, V _{DS} = 0			±100	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1mA	2.0		3.0	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = 10V, I _D = 0.5A	1.1	2.2		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)}	I _D = 0.5A, V _{GS} = 10V		2.0	2.6	Ω
Input Capacitance	C _{iss}	V _{DS} = 20V, f = 1MHz		400		pF
Output Capacitance	C _{oss}	V _{DS} = 20V, f = 1MHz		60		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 20V, f = 1MHz		25		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		12		ns
Rise Time	t _r	"		20		ns
Turn-OFF Delay Time	t _{d(off)}	"		80		ns
Fall Time	t _f	"		35		ns
Diode Forward Voltage	V _{SD}	I _S = 3A, V _{GS} = 0			1.8	V

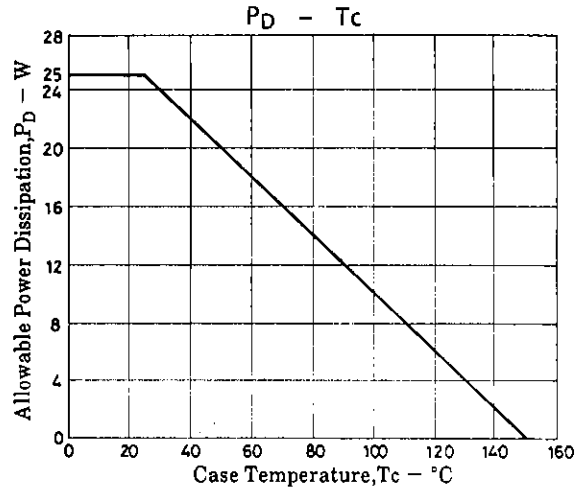
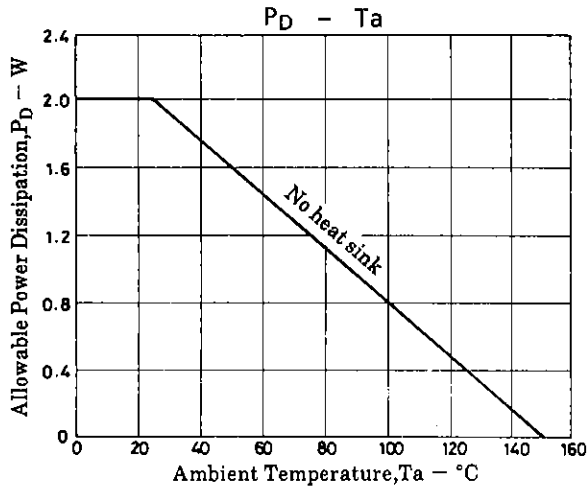
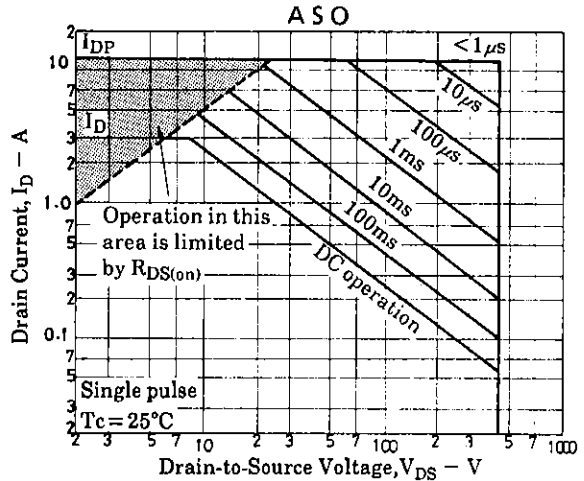
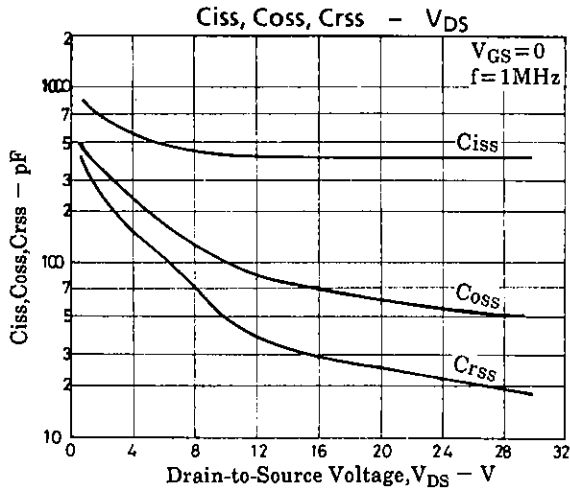
(Note) Be careful in handling the 2SK1444 because it has no protection diode between gate and source.

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

SANYO : TO-220F(LS)

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN





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