

SANYO	No.4984A	2SK2441
		N-Channel Silicon MOSFET Ultrahigh-Speed Switching Applications

Features

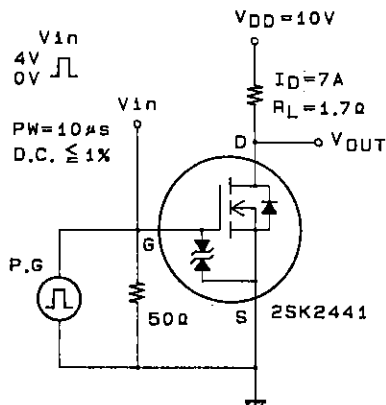
- Low ON resistance.
- Ultrahigh-speed switching.
- 2.5V drive.

Absolute Maximum Ratings at Ta = 25°C

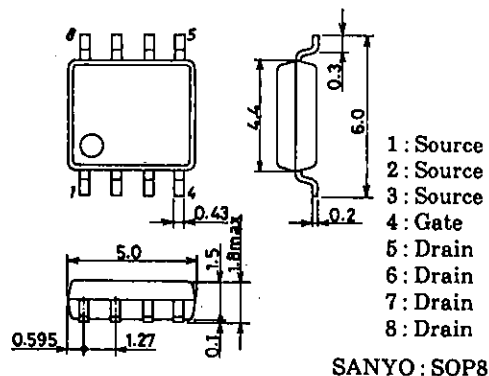
			unit
Drain-to-Source Voltage	V _{DSS}	20	V
Gate-to-Source Voltage	V _{GSS}	±12	V
Drain Current(DC)	I _D	7	A
Drain Current(Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	48 A
Allowable Power Dissipation	P _D	Mounted on ceramic board (1000mm ² × 0.8mm)	2.0 W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

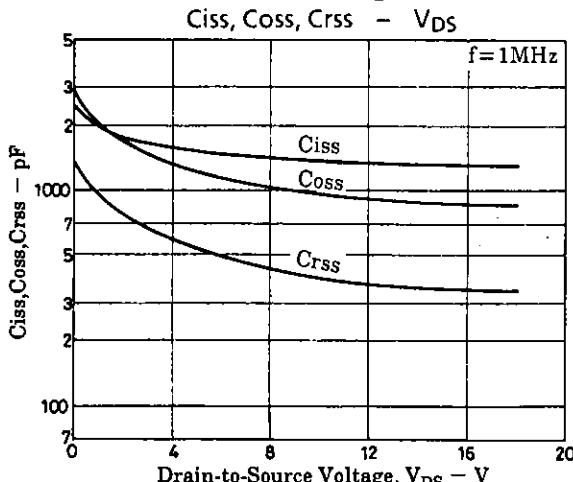
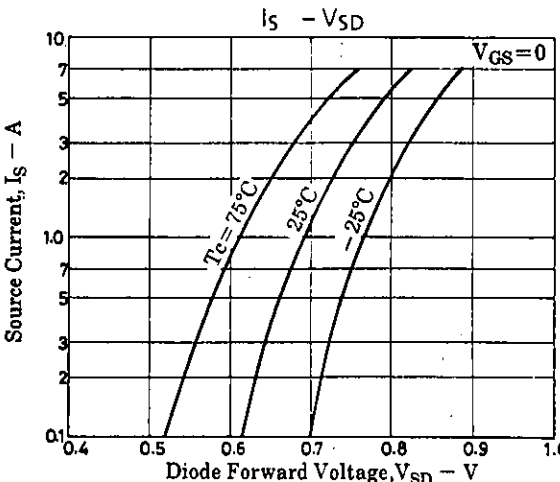
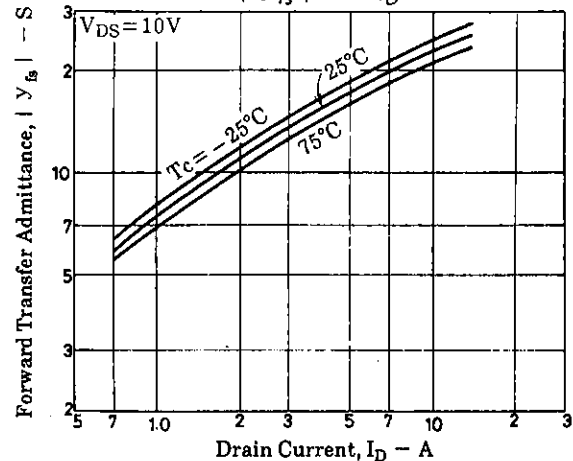
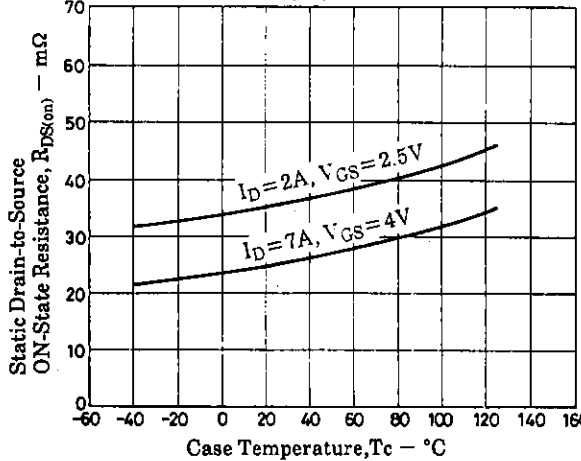
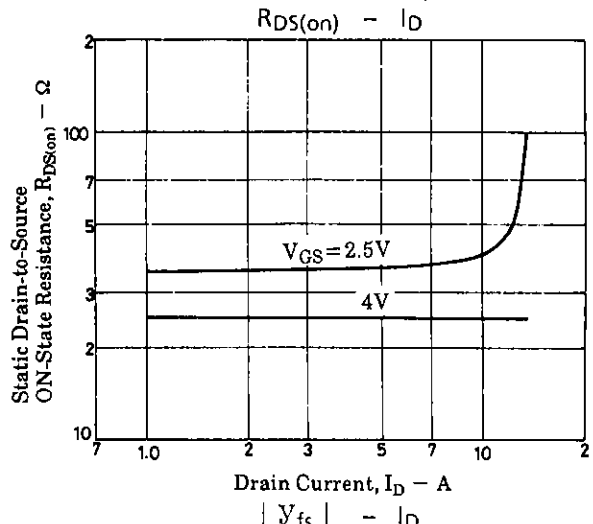
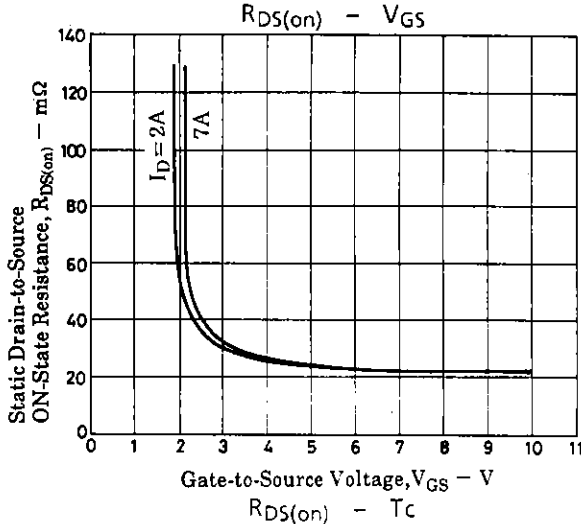
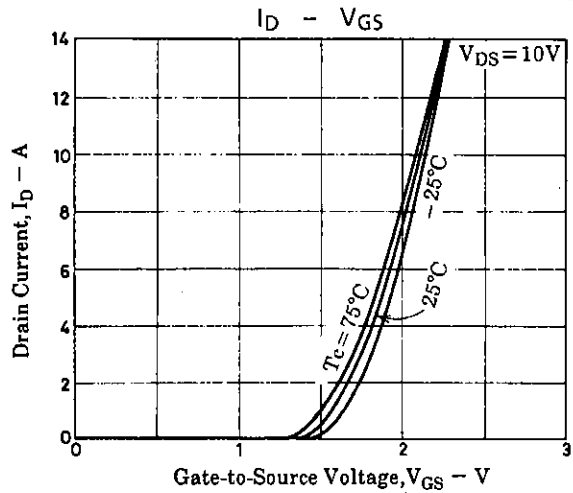
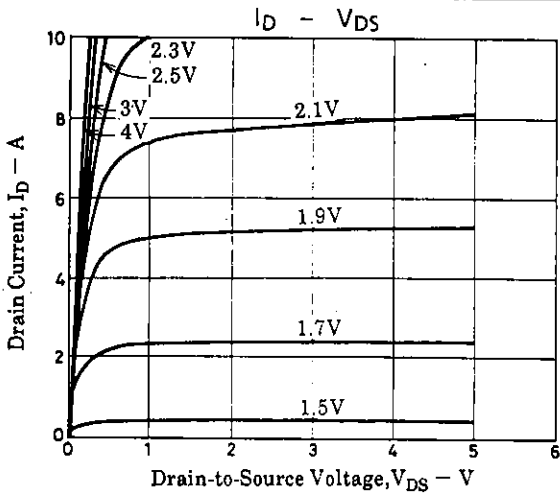
			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	20			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = 16V, V _{GS} = 0			100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±10V, V _{DS} = 0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1mA	0.4		1.4	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = 10V, I _D = 7A	12	18		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)1}	I _D = 7A, V _{GS} = 4V		25	32	mΩ
	R _{DS(on)2}	I _D = 2A, V _{GS} = 2.5V		37	48	mΩ
Input Capacitance	C _{iss}	V _{DS} = 10V, f = 1MHz		1300		pF
Output Capacitance	C _{oss}	V _{DS} = 10V, f = 1MHz		950		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 10V, f = 1MHz		400		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		30		ns
Rise Time	t _r	"		190		ns
Turn-OFF Delay Time	t _{d(off)}	"		190		ns
Fall Time	t _f	"		180		ns
Diode Forward Voltage	V _{SD}	I _S = 7A, V _{GS} = 0		1.0	1.2	V

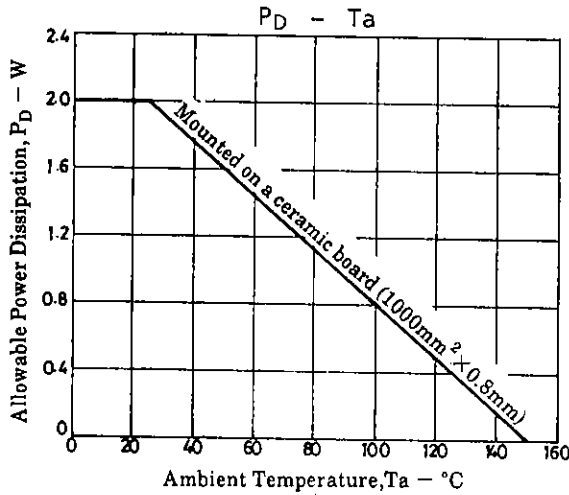
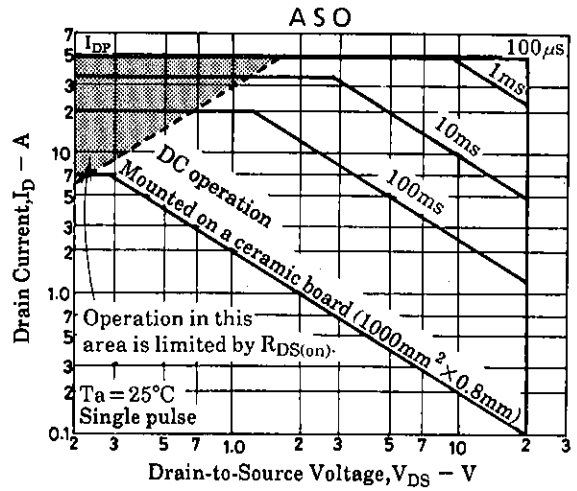
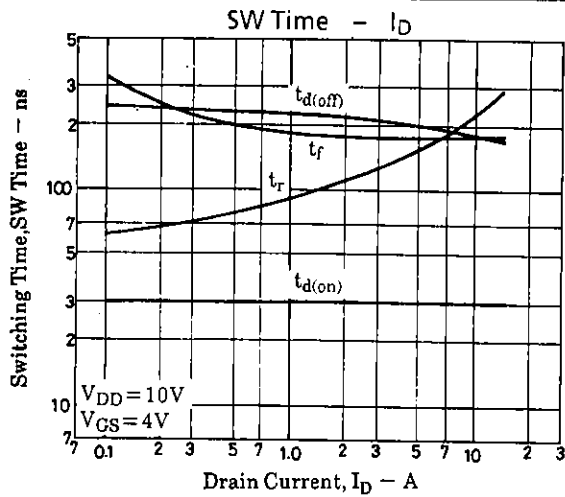
Switching Time Test Circuit**Package Dimensions 2116**

(unit : mm)

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