

SANYO	No.5313A	2SJ419
		P-Channel MOS Silicon FET

Ultrahigh-Speed Switching Applications

Features

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

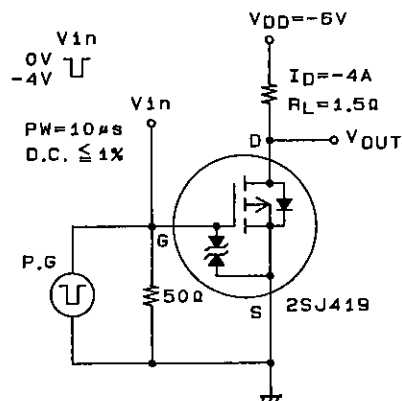
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain-to-Source Voltage	V _{DSS}	-12	V
Gate-to-Source Voltage	V _{GSS}	±10	V
Drain Current (DC)	I _D	-4	A
Drain Current (Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	-32 A
Allowable Power Dissipation	P _D	Mounted on ceramic board (1200mm ² × 0.8mm)	2.0 W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

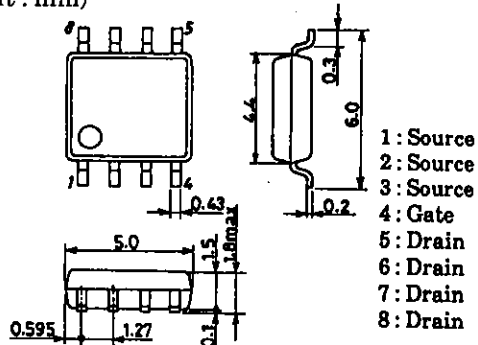
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = -1mA, V _{GS} = 0	-12			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = -10V, V _{GS} = 0			-100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±8V, V _{DS} = 0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} = -6V, I _D = -1mA	-0.4		-1.4	V
Forward Transfer Admittance	y _{fs}	V _{DS} = -6V, I _D = -4A	6	8		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)1}	I _D = -4A, V _{GS} = -4V		65	82	mΩ
	R _{DS(on)2}	I _D = -2A, V _{GS} = -2.5V		90	144	mΩ
Input Capacitance	C _{iss}	V _{DS} = -6V, f = 1MHz		1000		pF
Output Capacitance	C _{oss}	V _{DS} = -6V, f = 1MHz		800		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = -6V, f = 1MHz		420		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		25		ns
Rise Time	t _r	"		170		ns
Turn-OFF Delay Time	t _{d(off)}	"		180		ns
Fall Time	t _f	"		270		ns
Diode Forward Voltage	V _{SD}	I _S = -4A, V _{GS} = 0	-1.0	-1.2		V

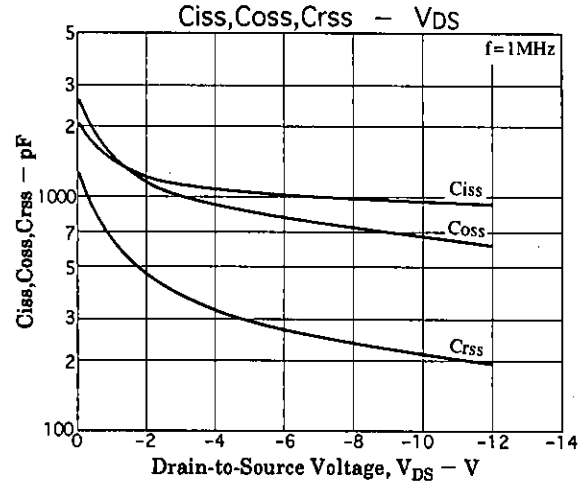
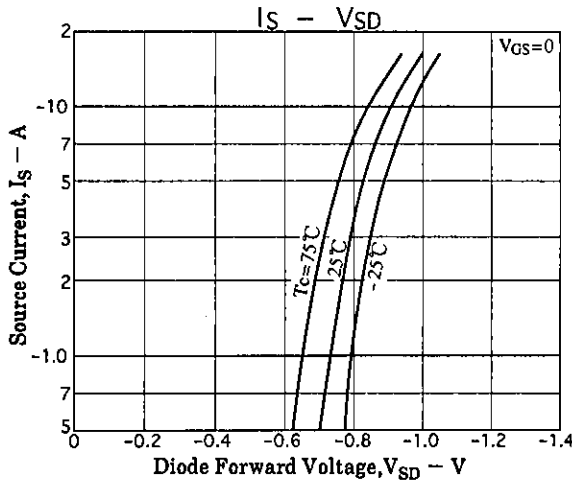
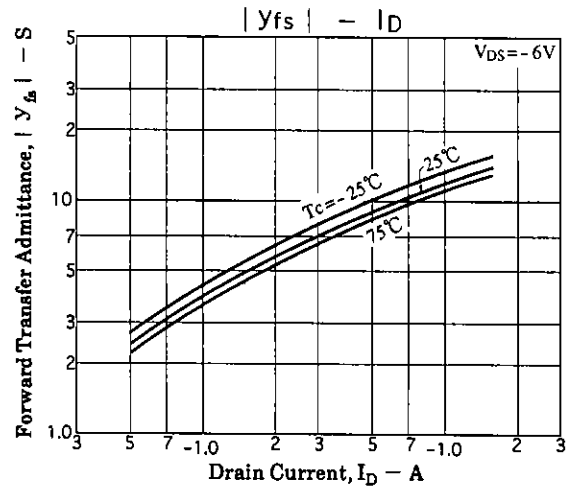
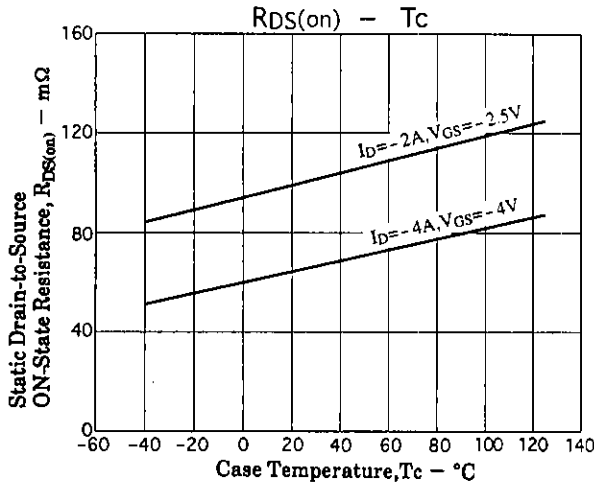
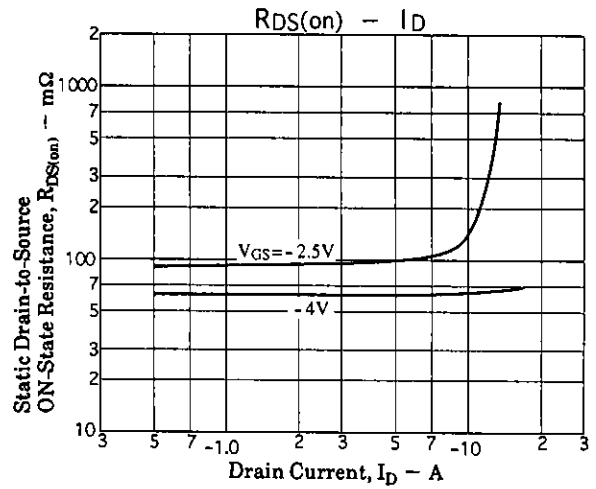
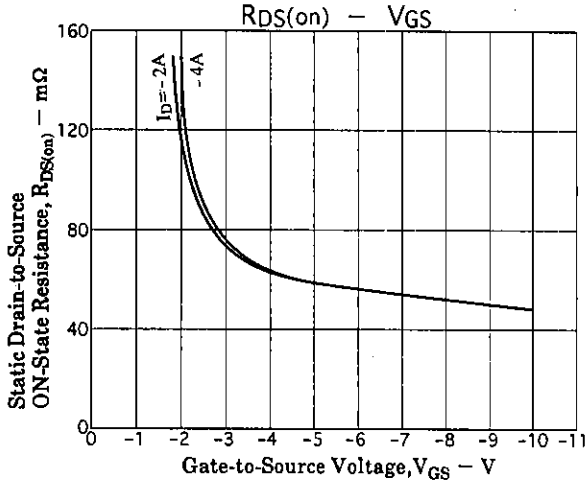
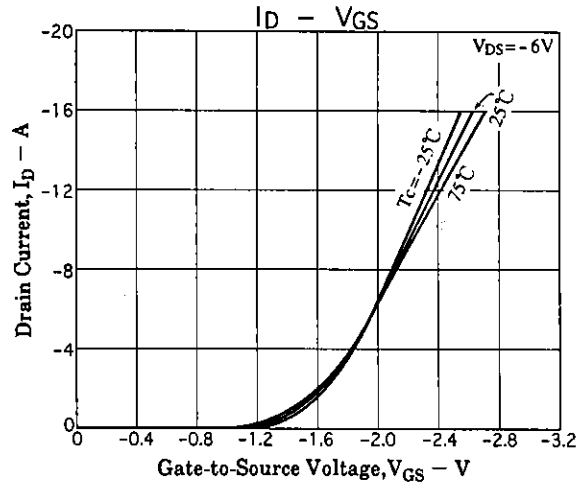
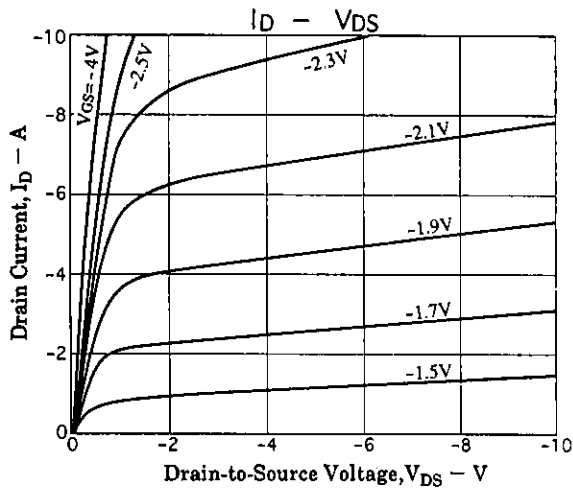
Switching Time Test Circuit

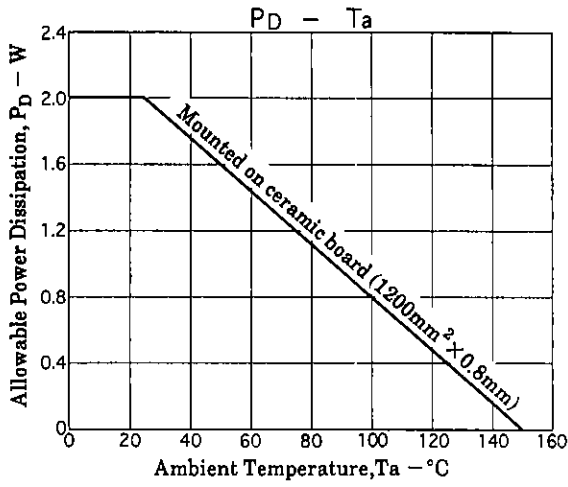
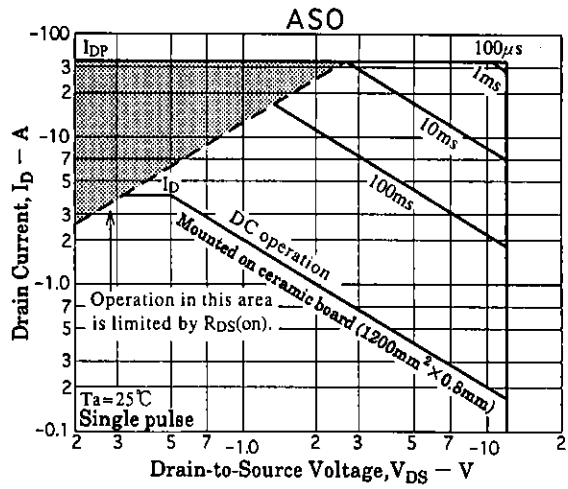
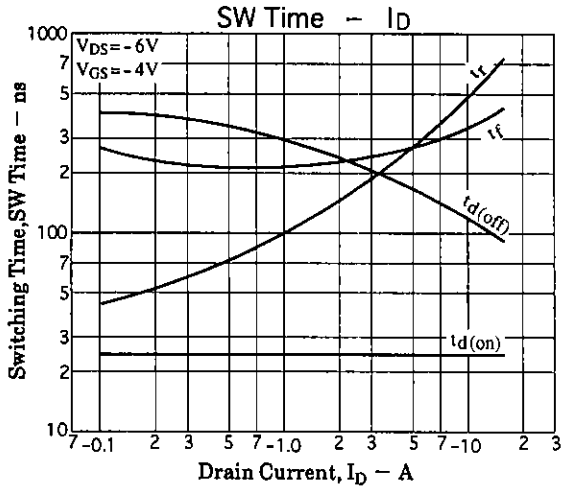


Package Dimensions 2116 (unit: mm)



SANYO: SOP8





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