

SANYO	No.5077	2SJ421
		P-Channel Silicon MOSFET Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- 4V drive.

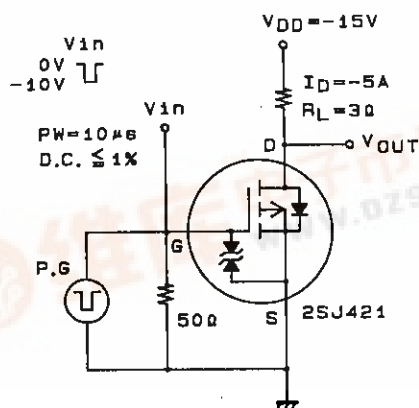
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain-to-Source Voltage	V _{DSS}	-30	V
Gate-to-Source Voltage	V _{GSS}	±20	V
Drain Current (DC)	I _D	-5	A
Drain Current (Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	-32 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

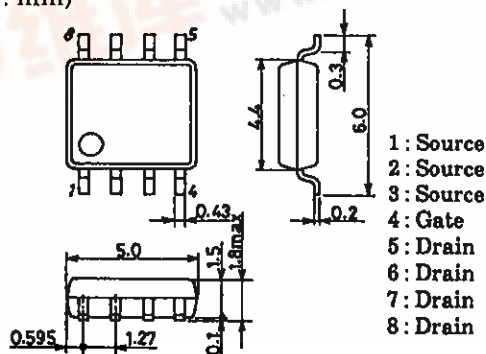
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = -1mA, V _{GS} = 0	-30			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = -30V, V _{GS} = 0			-100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±16V, V _{DS} = 0			±10	μA
Gate-to-Source Cutoff Voltage	V _{GS(off)}	V _{DS} = -10V, I _D = -1mA	-1.0		-2.5	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = -10V, I _D = -5A	6	10		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)1}	I _D = -5A, V _{GS} = -10V		45	58	mΩ
	R _{DS(on)2}	I _D = -2A, V _{GS} = -4V		65	107	mΩ
Input Capacitance	C _{iss}	V _{DS} = -10V, f = 1MHz		1000		pF
Output Capacitance	C _{oss}	V _{DS} = -10V, f = 1MHz		800		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = -10V, f = 1MHz		240		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		25		ns
Rise Time	t _r	∞		140		ns
Turn-OFF Delay Time	t _{d(off)}	∞		350		ns
Fall Time	t _f	∞		300		ns
Diode Forward Voltage	V _{SD}	I _S = -5A, V _{GS} = 0	-1.0	-1.2		V

Switching Time Test Circuit

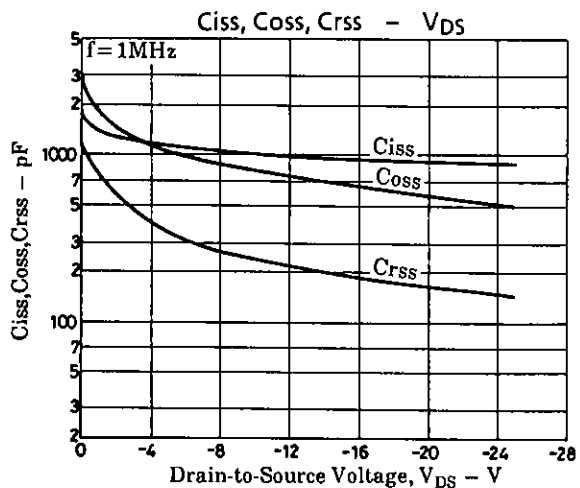
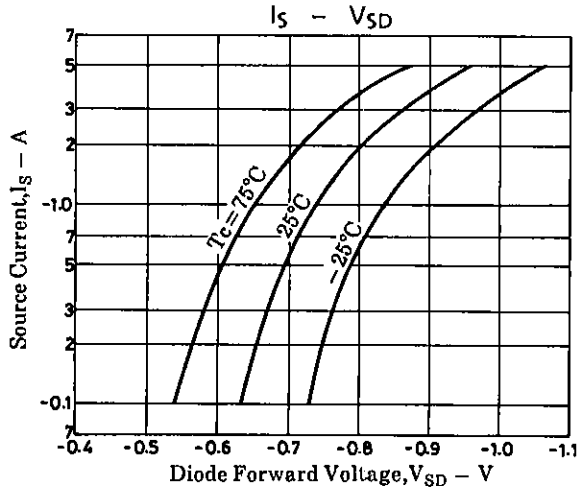
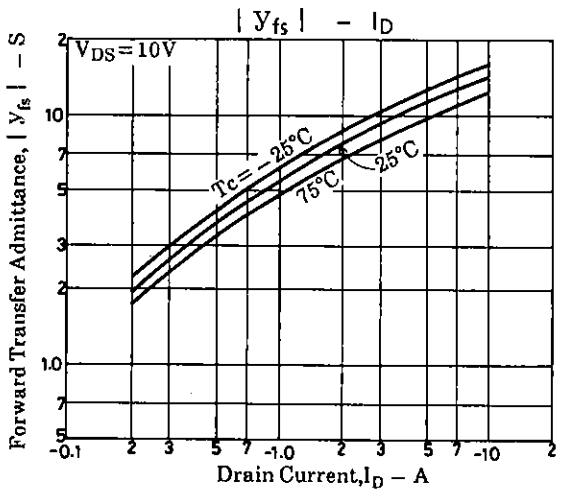
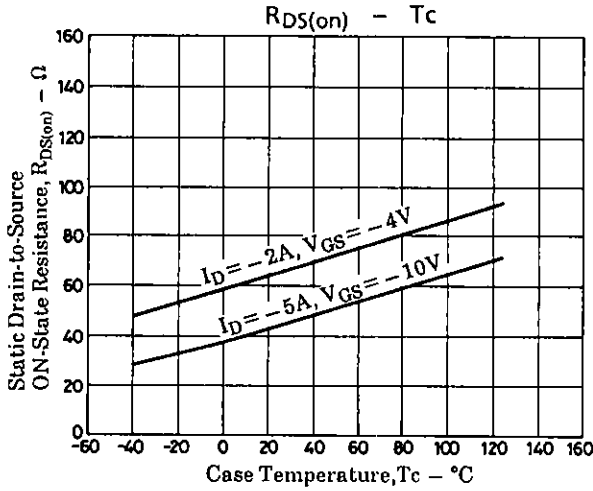
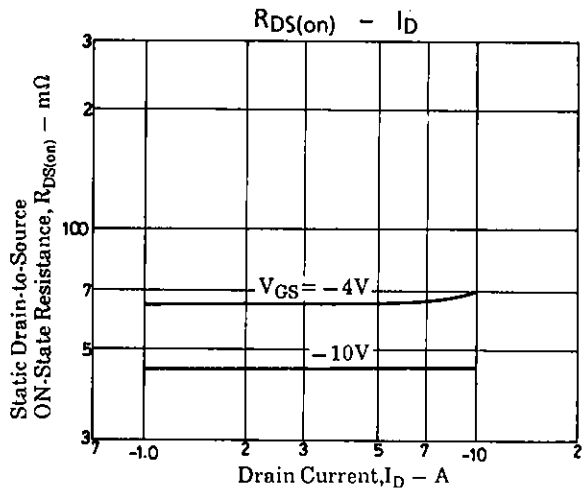
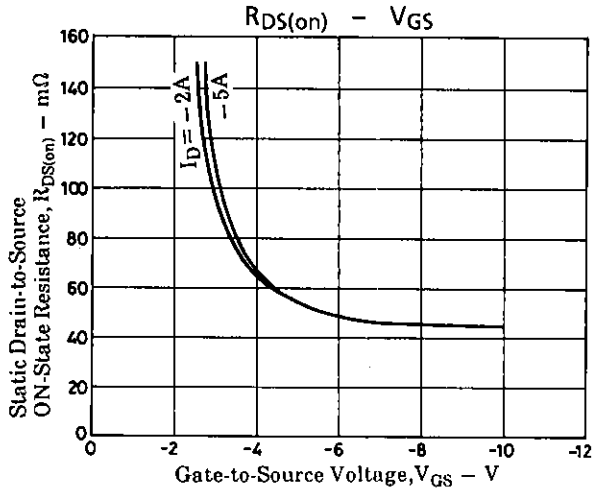
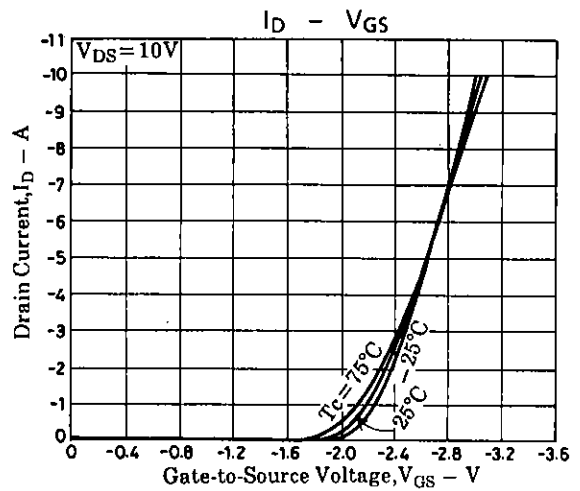
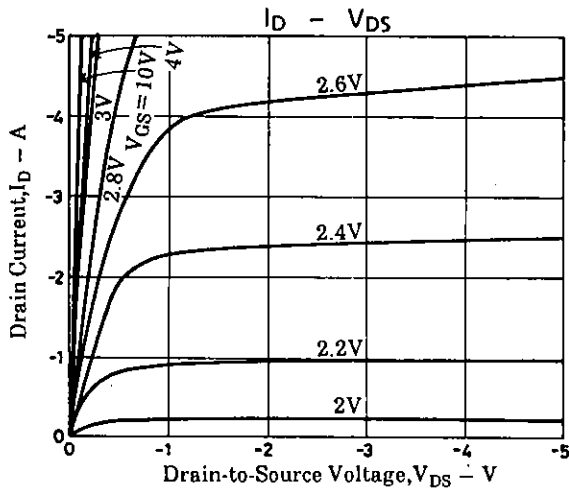


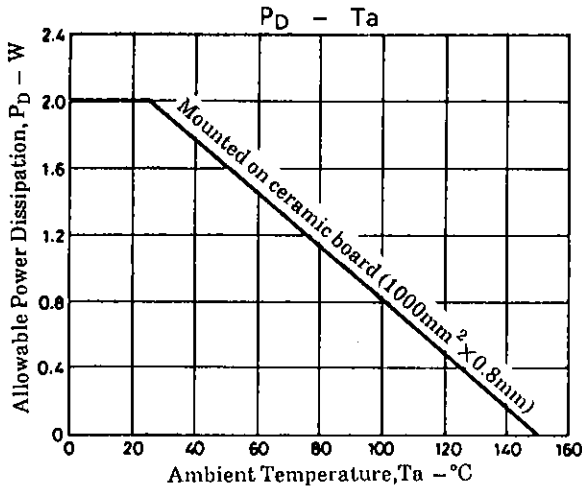
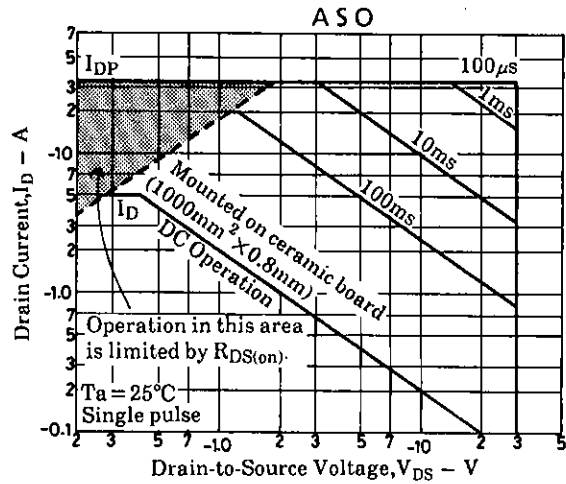
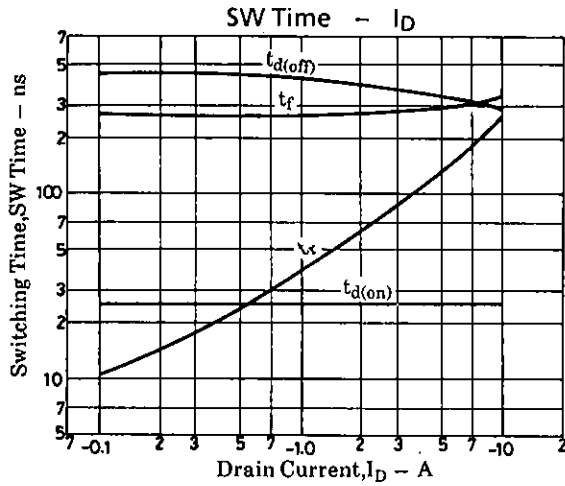
Package Dimensions 2116
(unit: mm)



SANYO: SOP8







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