

SANYO	No.3816	2SJ231
	P-Channel MOS Silicon FET	
Very High-Speed Switching Applications		

Features

- Small ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Meets radial taping.

Absolute Maximum Ratings at Ta = 25°C

			unit
Drain to Source Voltage	V _{DSS}	-100	V
Gate to Source Voltage	V _{GSS}	±15	V
Drain Current (DC)	I _D	-0.5	A
Drain Current (Pulse)	I _{DP}	-2	A
Allowable Power Dissipation	P _D	1	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

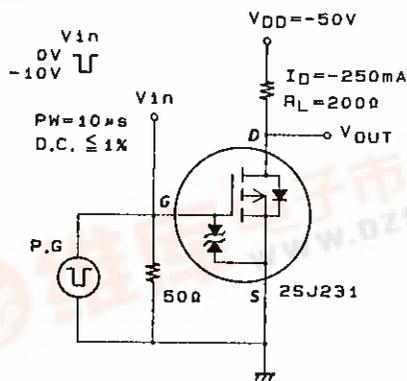
PW ≤ 10 μs, duty cycle ≤ 1%

Electrical Characteristics at Ta = 25°C

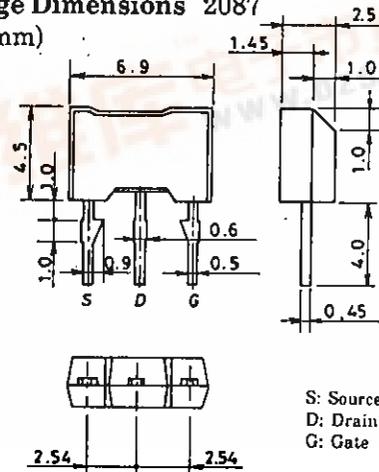
		min	typ	max	unit	
D-S Breakdown Voltage	V _{(BR)DSS}	-100			V	
Zero Gate Voltage Drain Current	I _{DSS}			-100	μA	
Gate to Source Leakage Current	I _{GSS}			±10	μA	
Cutoff Current	V _{GSS(off)}	-1.0		-2.0	V	
Forward Transfer Admittance	Y _{fs}	400	700		mS	
Static Drain to Source on State Resistance	R _{DS(on)}		1.8	2.4	Ω	
	R _{DS(on)}		2.4	3.5	Ω	
Input Capacitance	C _{iss}		160		pF	
Output Capacitance	C _{oss}		40		pF	
Reverse Transfer Capacitance	C _{rss}		6		pF	
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.			10	ns
Rise Time	t _r		12		ns	
Turn-OFF Delay Time	t _{d(off)}		80		ns	
Fall Time	t _f		40		ns	
Diode Forward Voltage	V _{SD}		-0.9		V	

I_D = -1mA, V_{GS} = 0
V_{DS} = -100V, V_{GS} = 0
V_{GS} = ±12V, V_{DS} = 0
V_{DS} = -10V, I_D = -1mA
V_{DS} = -10V, I_D = -250mA
I_D = -250mA, V_{GS} = -10V
I_D = -250mA, V_{GS} = -4V
V_{DS} = -20V, f = 1MHz
V_{DS} = -20V, f = 1MHz
V_{DS} = -20V, f = 1MHz
I_S = -500mA, V_{GS} = 0

Switching Time Test Circuit

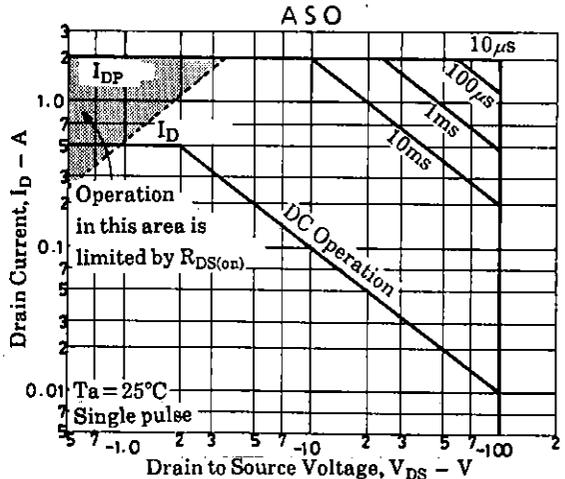
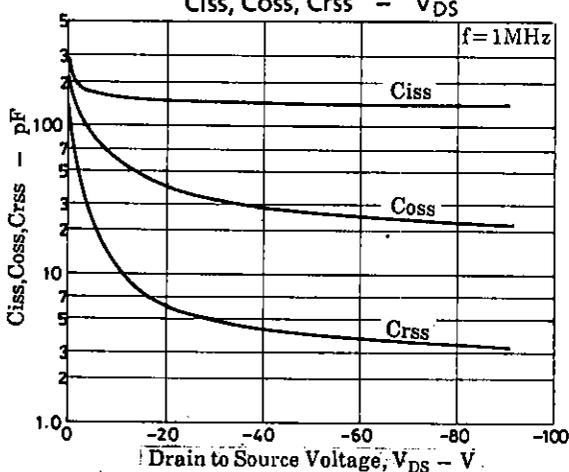
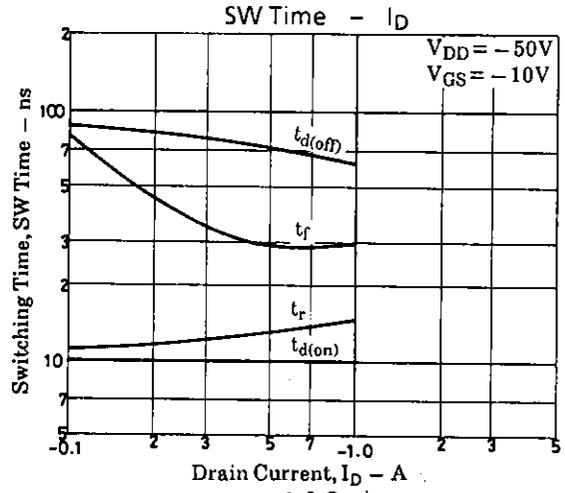
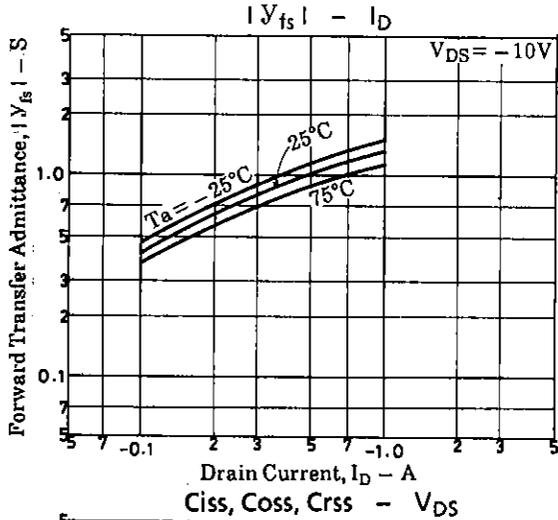
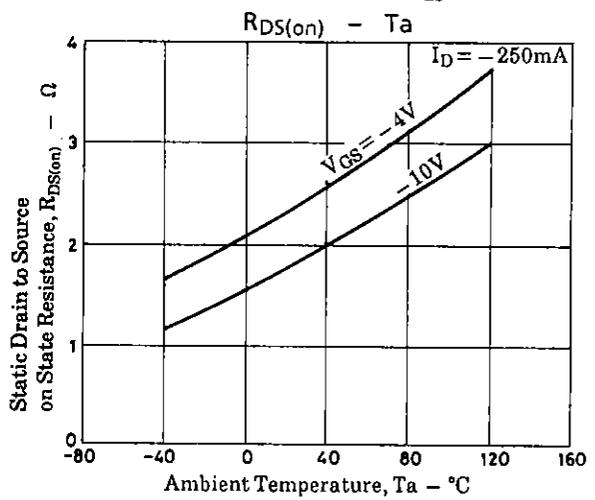
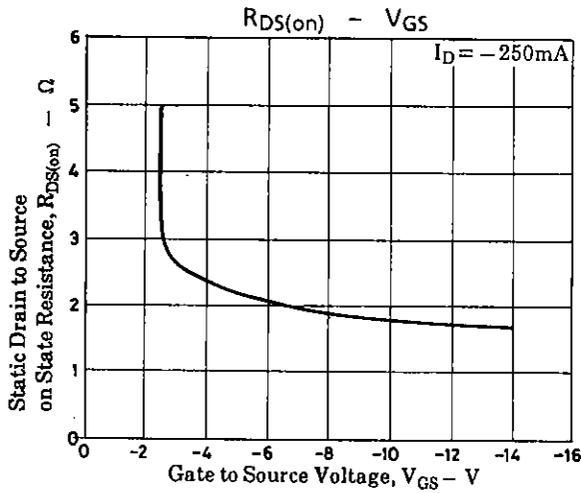
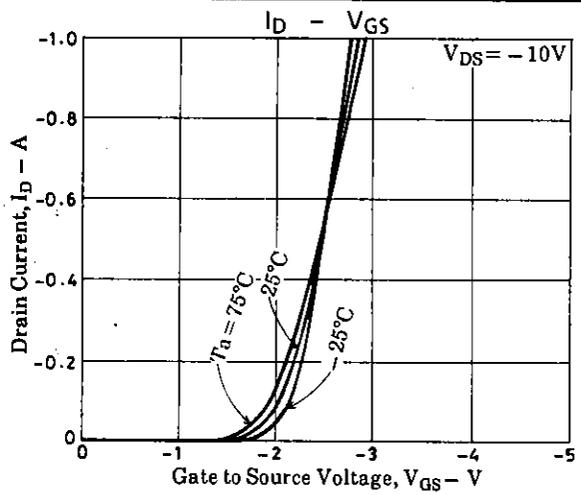
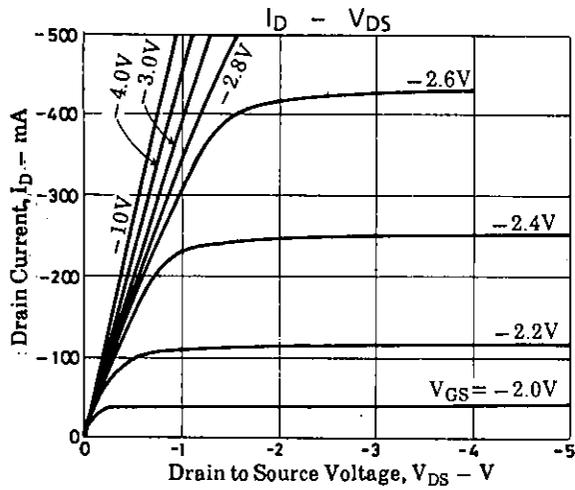


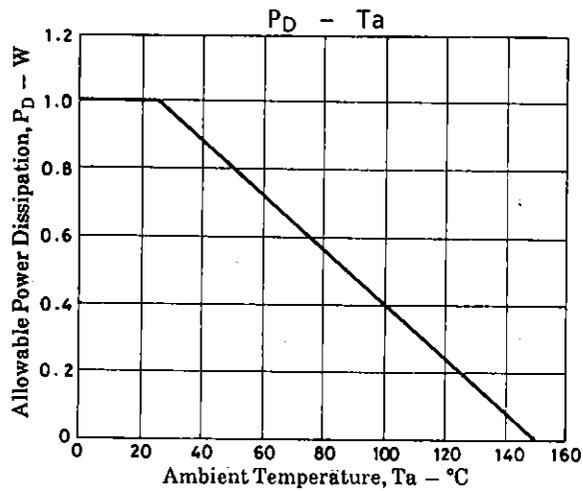
Package Dimensions 2087
(unit: mm)



S: Source
D: Drain
G: Gate
SANYO: NMP







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