

<b>SANYO</b>	No.3810	2SJ225
		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**

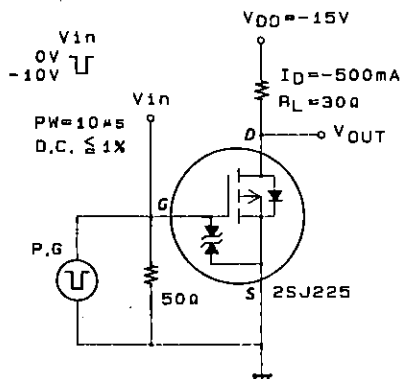
			unit
Drain to Source Voltage	V <sub>DSS</sub>	-30	V
Gate to Source Voltage	V <sub>GSS</sub>	±15	V
Drain Current (DC)	I <sub>D</sub>	-1	A
Drain Current (Pulse)	I <sub>DP</sub>	-4	A
Allowable Power Dissipation	P <sub>D</sub>	1	W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

PW ≤ 10 μs, duty cycle ≤ 1%

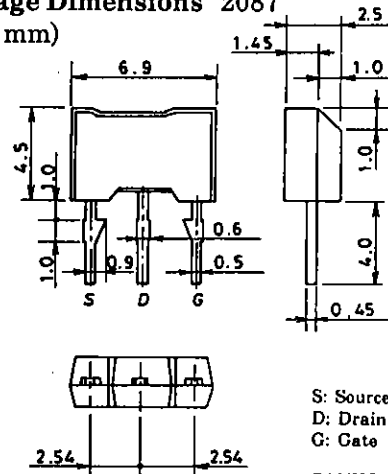
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> = 0	-30			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = -30V, V <sub>GS</sub> = 0			-100	μA
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±12V, V <sub>DS</sub> = 0			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -1mA	-1.0		-2.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -500mA	0.6	1.0		S
Static Drain to Source on State Resistance	R <sub>DSON</sub>	I <sub>D</sub> = -500mA, V <sub>GS</sub> = -10V		0.5	0.75	Ω
	R <sub>DSON</sub>	I <sub>D</sub> = -500mA, V <sub>GS</sub> = -4V		0.75	1.1	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -10V, f = 1MHz		170		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -10V, f = 1MHz		110		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = -10V, f = 1MHz		20		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.		10		ns
Rise Time	t <sub>r</sub>	∕		13		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	∕		70		ns
Fall Time	t <sub>f</sub>	∕		30		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = -1A, V <sub>GS</sub> = 0.		-0.9		V

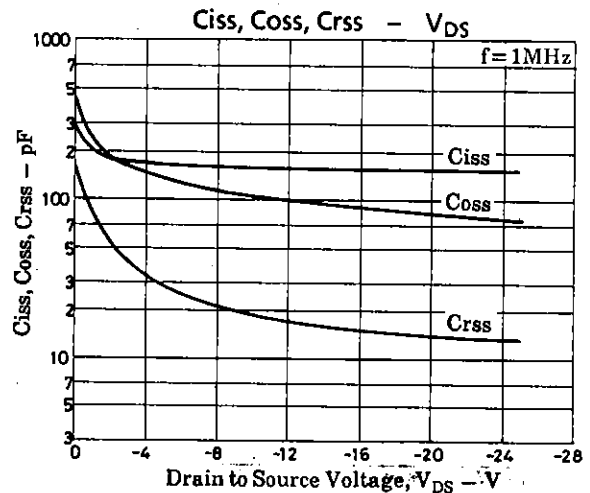
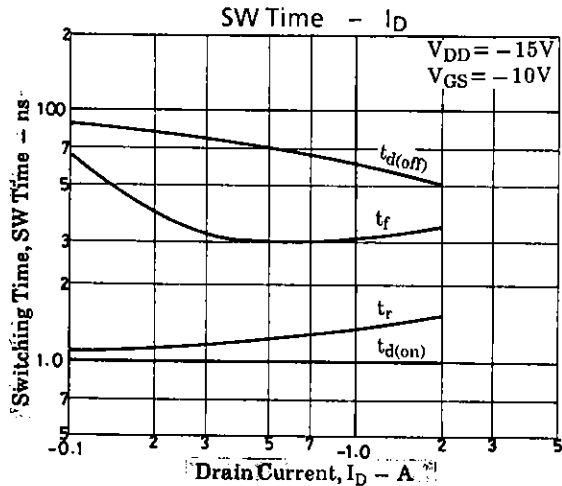
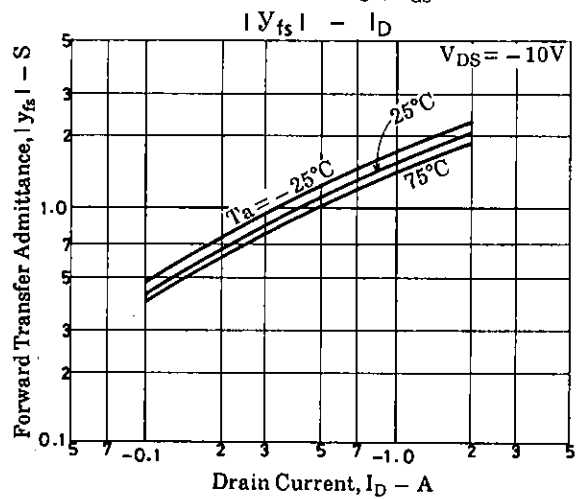
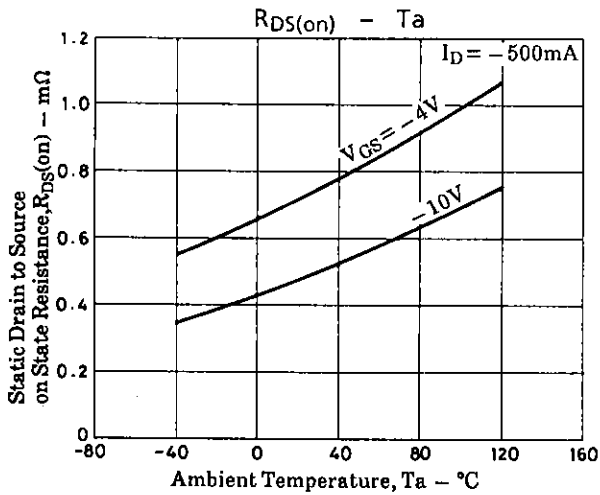
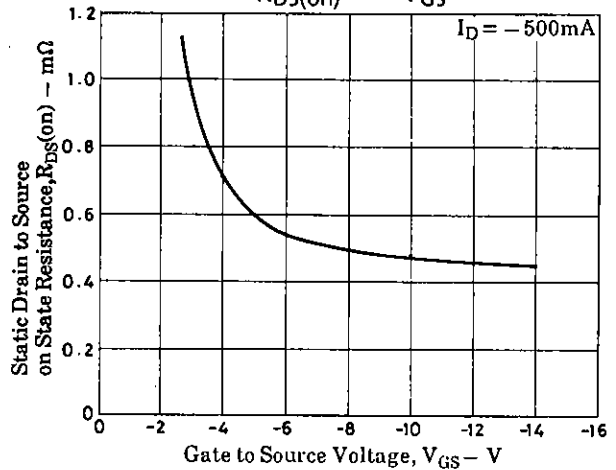
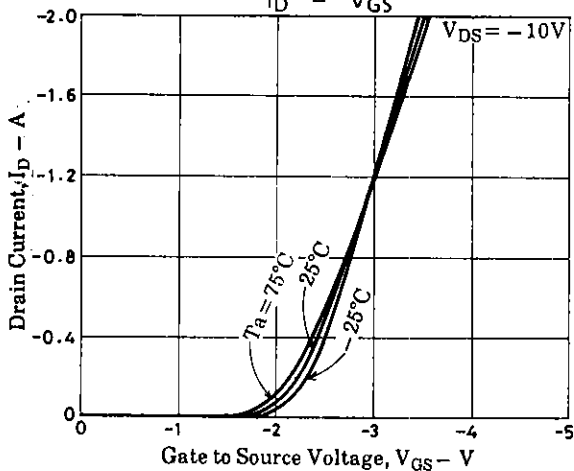
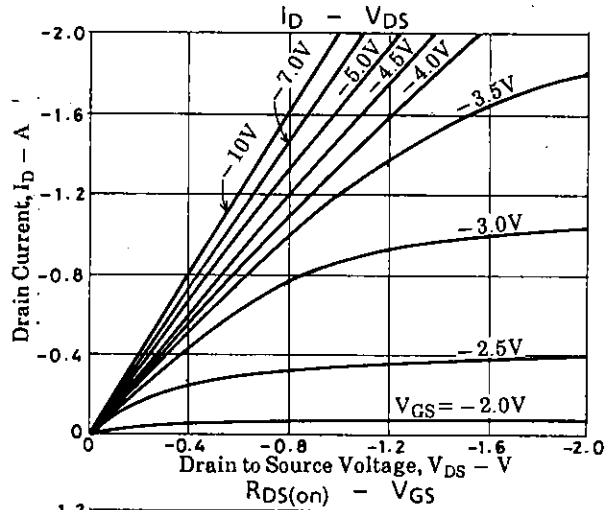
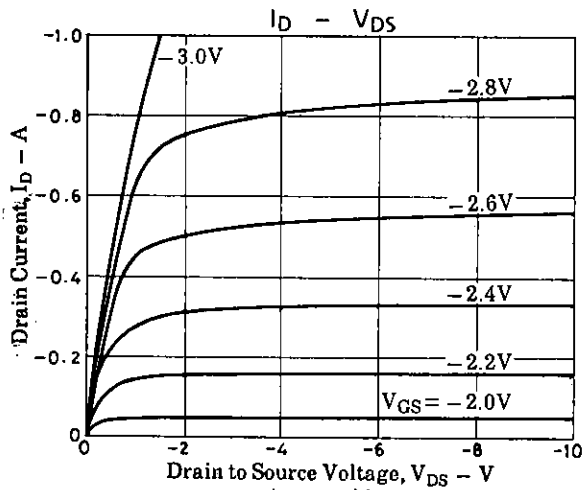
**Switching Time Test Circuit**

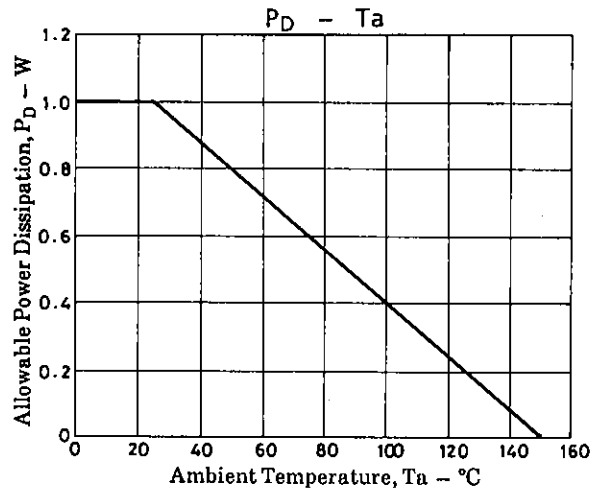
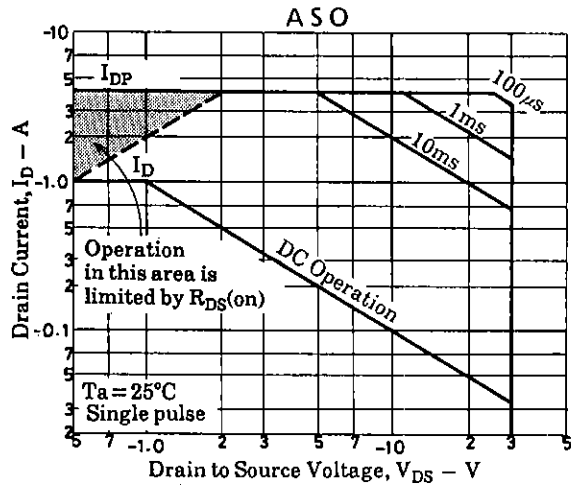


**Package Dimensions 2087**  
(unit: mm)



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





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