



No.3813

2SJ228

P-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

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

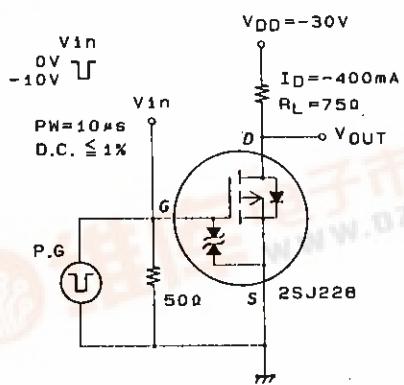
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Absolute Maximum Ratings at $T_A = 25^\circ C$		unit
Drain to Source Voltage	V_{DSS}	-60 V
Gate to Source Voltage	V_{GSS}	± 15 V
Drain Current (DC)	I_D	-0.8 A
Drain Current (Pulse)	I_{DP}	PW $\leq 10\ \mu s$, duty cycle $\leq 1\%$ -3.2 A
Allowable Power Dissipation	P_D	1 W
Channel Temperature	T_{ch}	150 $^\circ C$
Storage Temperature	T_{stg}	-55 to +150 $^\circ C$

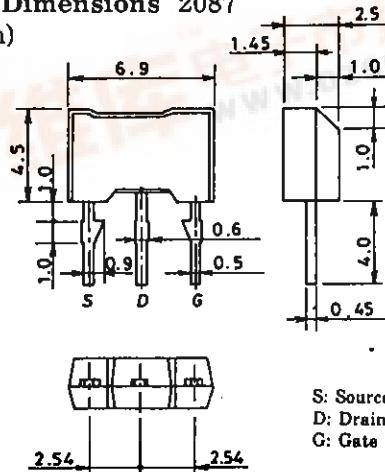
Electrical Characteristics at Ta = 25°C

Characteristics at $T_a = 25^\circ C$		Min	Typ	Max	Unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1\text{mA}, V_{GS} = 0$	- 60		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -60\text{V}, V_{GS} = 0$		- 100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12\text{V}, V_{DS} = 0$		± 10	μA
Cutoff Voltage	$V_{GS(\text{off})}$	$V_{DS} = -10\text{V}, I_D = -1\text{mA}$	- 1.0	- 2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10\text{V}, I_D = -400\text{mA}$	0.5	0.9	S
Static Drain to Source On State Resistance	$R_{DS(\text{on})}$	$I_D = -400\text{mA}, V_{GS} = -10\text{V}$	0.9	1.2	Ω
Input Capacitance	C_{iss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$	160		pF
Output Capacitance	C_{oss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$	60		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20\text{V}, f = 1\text{MHz}$	10		pF
Turn-ON Delay Time	$t_{d(\text{on})}$	See specified Test Circuit.	10		ns
Rise Time	t_r	"	12		ns
Turn-OFF Delay Time	$t_{d(\text{off})}$	"	75		ns
Fall Time	t_f	"	30		ns
Diode Forward Voltage	V_{SD}	$I_S = -800\text{mA}, V_{GS} = 0$	- 0.9		V

Switching Time Test Circuit



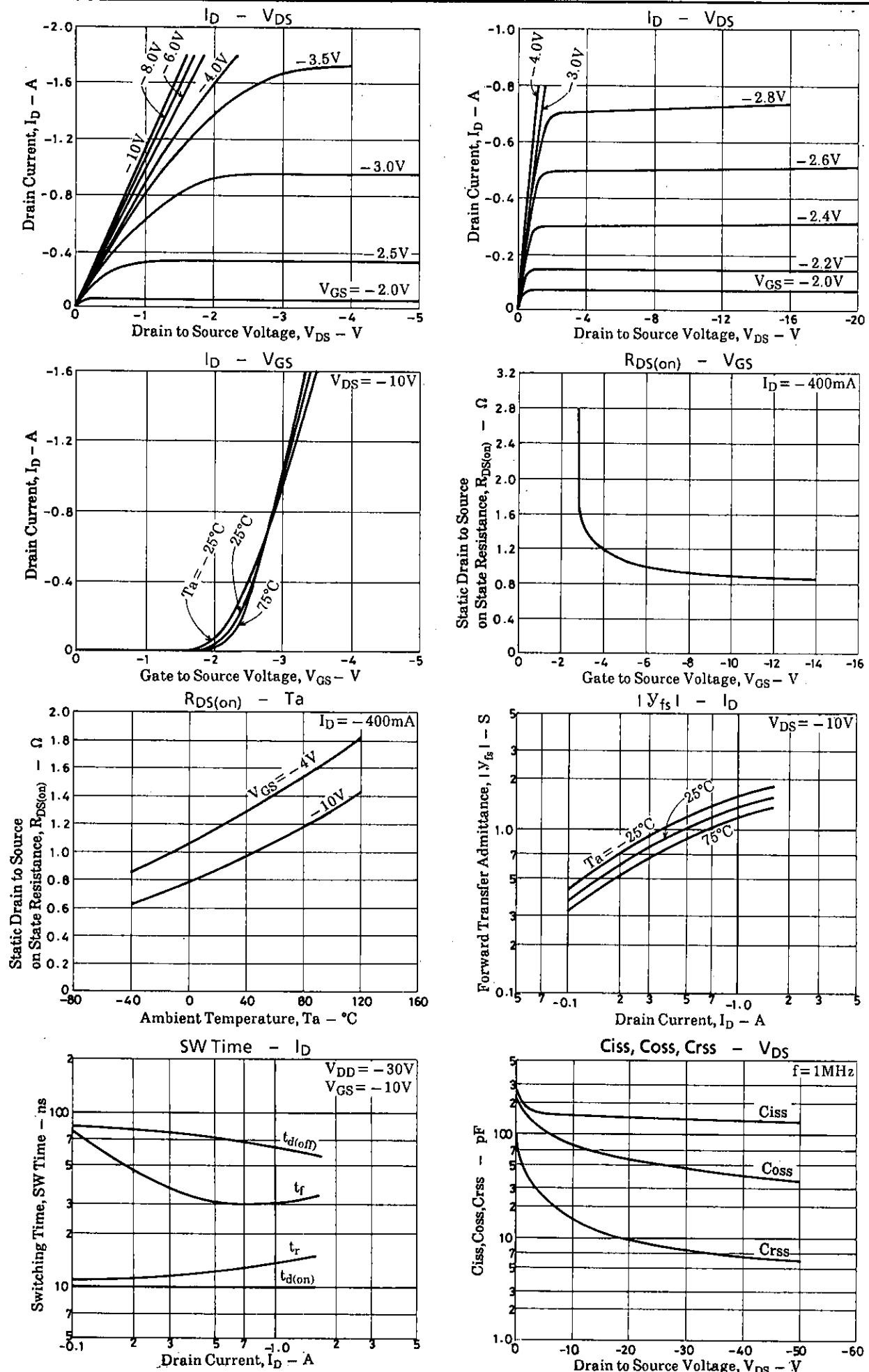
Package Dimensions 2087

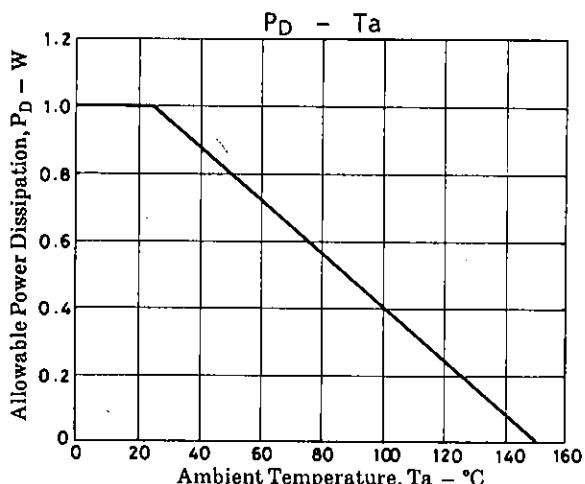
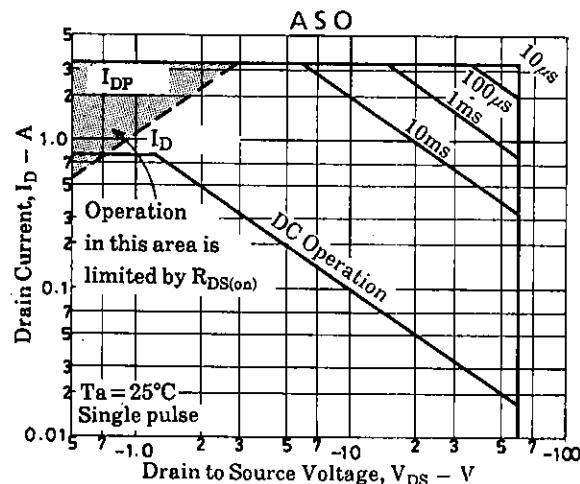


S: Source
D: Drain
G: Gate

SANYO: NMP

2SJ228





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