

SANYO	No.3822	2SK1727
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

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

Absolute Maximum Ratings at Ta = 25°C

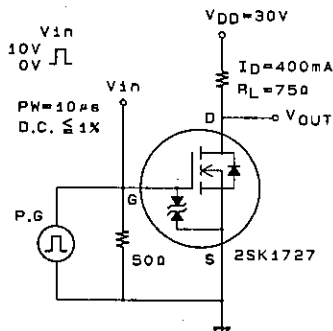
			unit
Drain to Source Voltage	V _{DSS}	60	V
Gate to Source Voltage	V _{GSS}	±15	V
Drain Current(DC)	I _D	0.8	A
Drain Current(Pulse)	I _{DP}	3.2	A
Allowable Power Dissipation	P _D	1	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

PW ≤ 10μs, duty cycle ≤ 1%

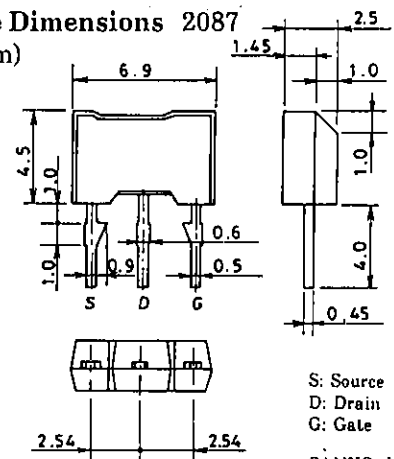
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	60			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 60V, V _{GS} = 0			10	μA
Gate to Source Leakage Current	I _{GSS}	V _{GS} = ±12V, V _{DS} = 0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1mA	1.0		2.0	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = 10V, I _D = 400mA	0.5	0.9		S
Static Drain to Source on State Resistance	R _{DS(on)}	I _D = 400mA, V _{GS} = 10V		0.9	1.2	Ω
	R _{DS(on)}	I _D = 400mA, V _{GS} = 4V		1.2	1.6	Ω
Input Capacitance	C _{iss}	V _{DS} = 20V, f = 1MHz		45		pF
Output Capacitance	C _{oss}	V _{DS} = 20V, f = 1MHz		22		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 20V, f = 1MHz		5		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		5		ns
Rise Time	t _r	∕		10		ns
Turn-OFF Delay Time	t _{d(off)}	∕		30		ns
Fall Time	t _f	∕		20		ns
Diode Forward Voltage	V _{SD}	I _S = 800mA, V _{GS} = 0		1.0		V

Switching Time Test Circuit

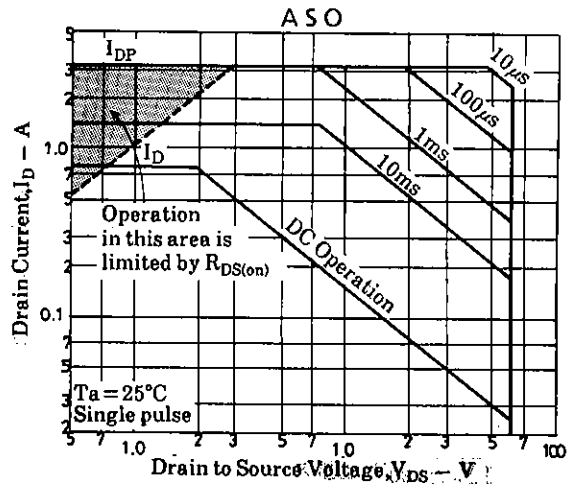
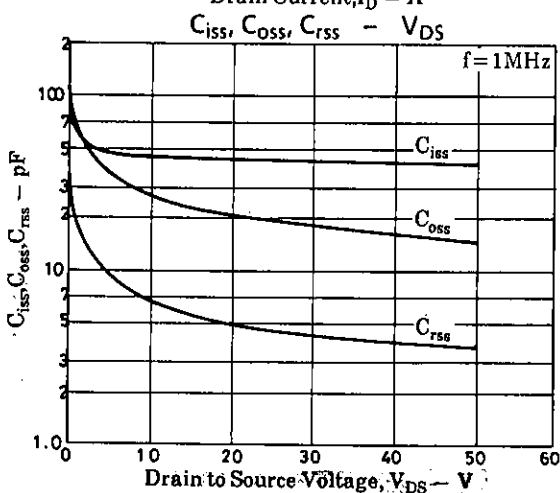
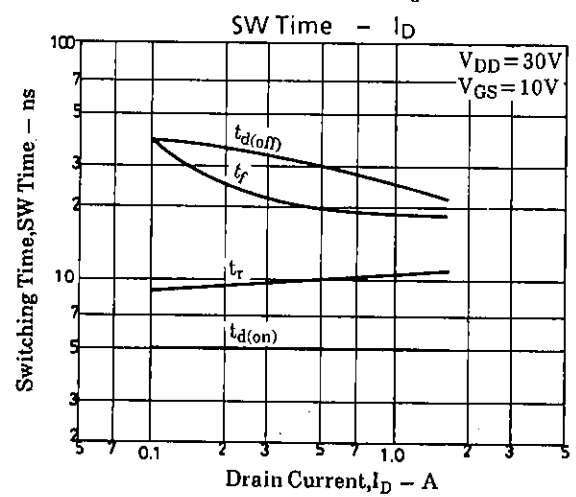
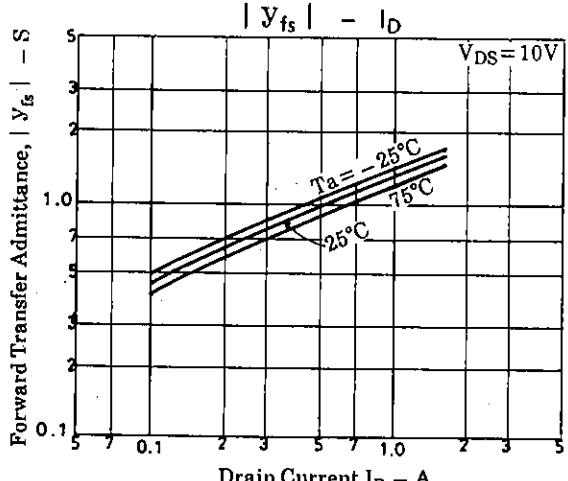
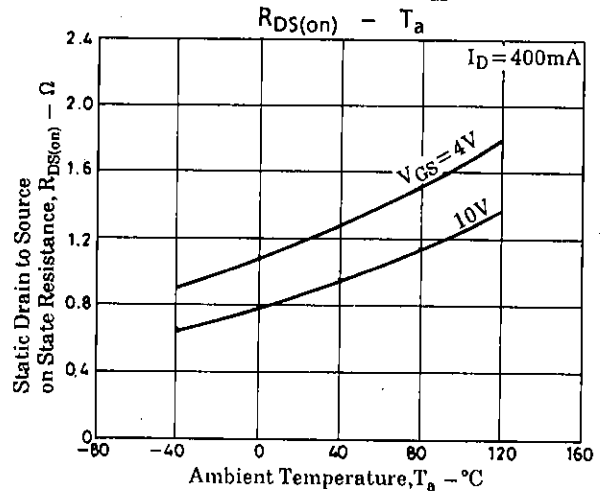
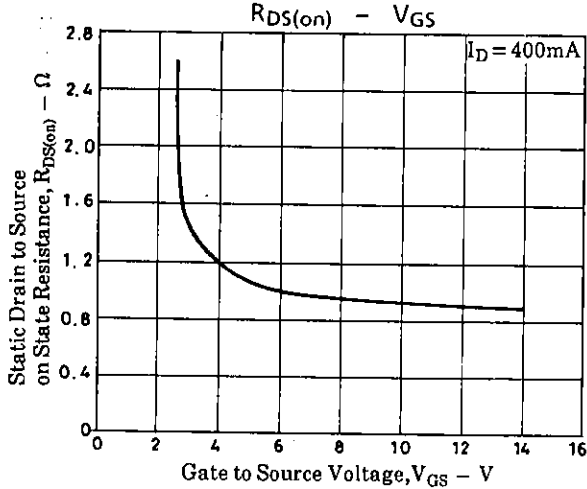
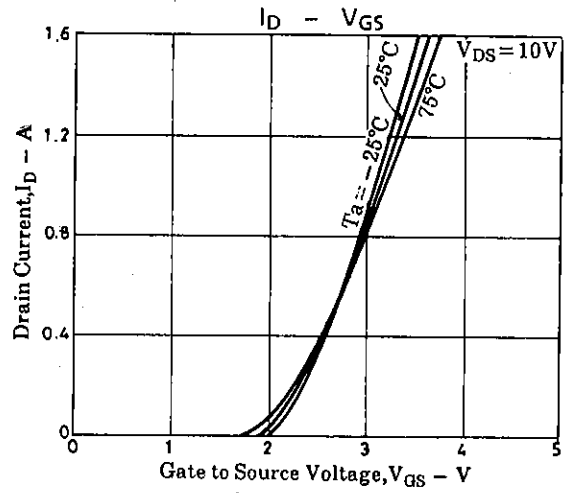
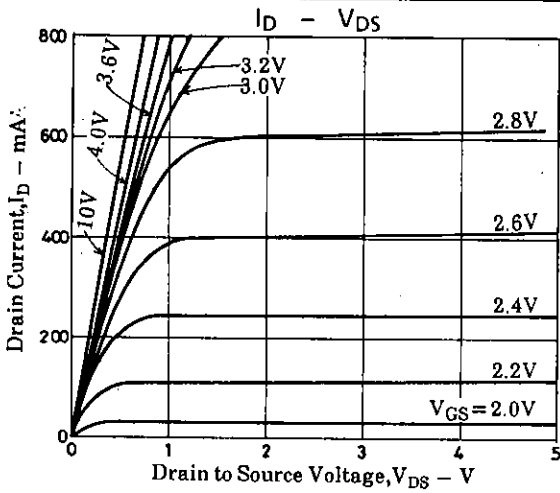


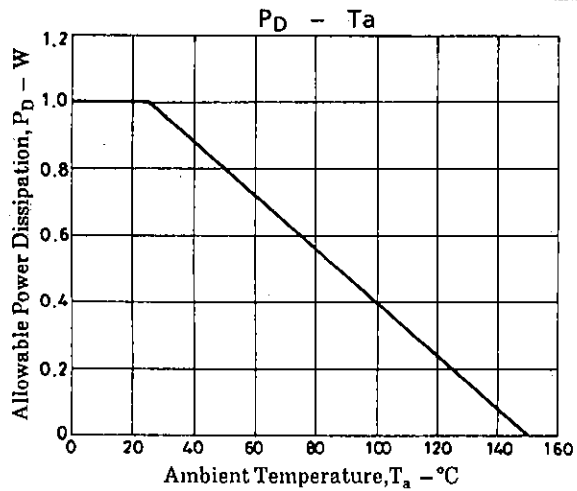
Package Dimensions 2087 (unit: mm)



S: Source
D: Drain
G: Gate

SANYO: NMP





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