

SANYO	No.3826	2SK1731
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Its height onboard is 9.5mm.
- Meets radial taping.

Absolute Maximum Ratings at Ta = 25°C

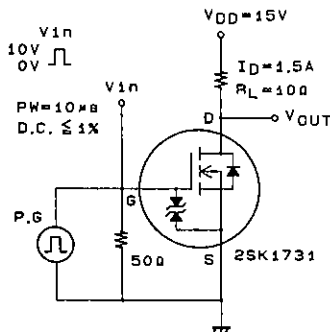
			unit
Drain to Source Voltage	V _{DSS}	30	V
Gate to Source Voltage	V _{GSS}	±15	V
Drain Current(DC)	I _D	3	A
Drain Current(Pulse)	I _{DP}	12	A
Allowable Power Dissipation	P _D	1.5	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

PW ≤ 10μs, duty cycle ≤ 1%

Electrical Characteristics at Ta = 25°C

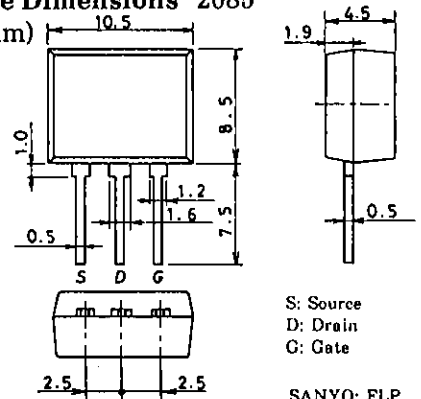
			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	30			V
G-S Breakdown Voltage	V _{(BR)GSS}	I _G = ±100μA, V _{DS} = 0	±15			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 30V, V _{GS} = 0			100	μA
Gate to Source Leakage Current	I _{GSS}	V _{GS} = ±12V, V _{DS} = 0			±10	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 = 1.5A	2	3.5		S
Static Drain to Source on State Resistance	R _{DS(on)}	I _D = 1.5A, V _{GS} = 10V		0.1	0.14	Ω
	R _{DS(on)}	I _D = 1.5A, V _{GS} = 4V		0.14	0.18	Ω
Input Capacitance	C _{iss}	V _{DS} = 10V, f = 1MHz		400		pF
Output Capacitance	C _{oss}	V _{DS} = 10V, f = 1MHz		250		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 10V, f = 1MHz		90		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		10		ns
Rise Time	t _r	"		18		ns
Turn-OFF Delay Time	t _{d(off)}	"		95		ns
Fall Time	t _f	"		60		ns
Diode Forward Voltage	V _{SD}	I _S = 3A, V _{GS} = 0	1.0	1.5		V

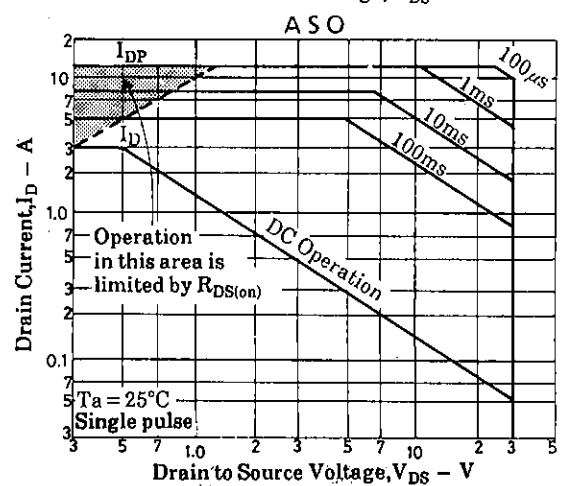
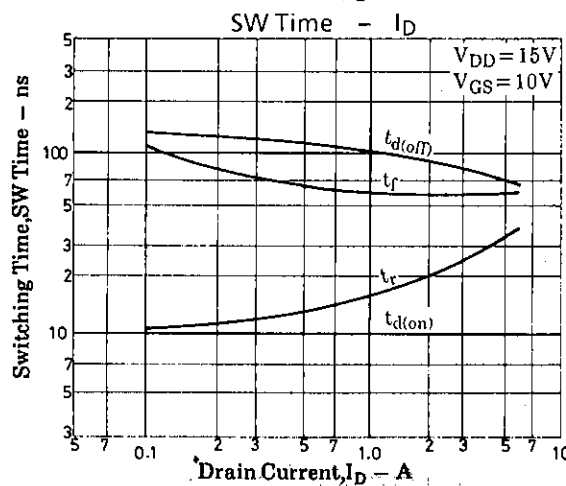
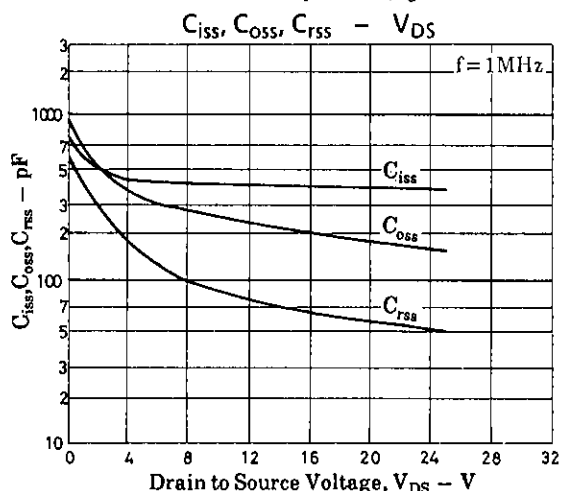
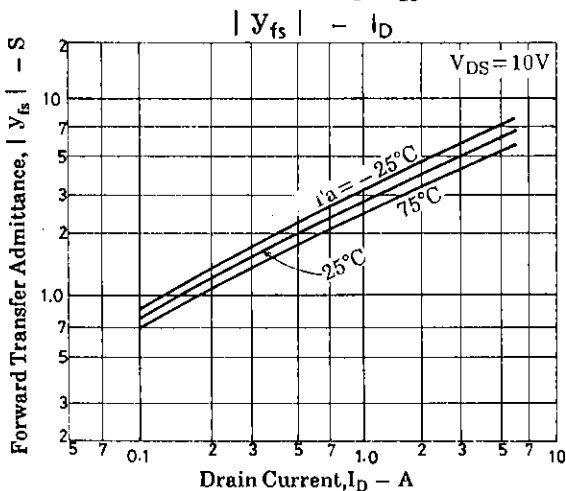
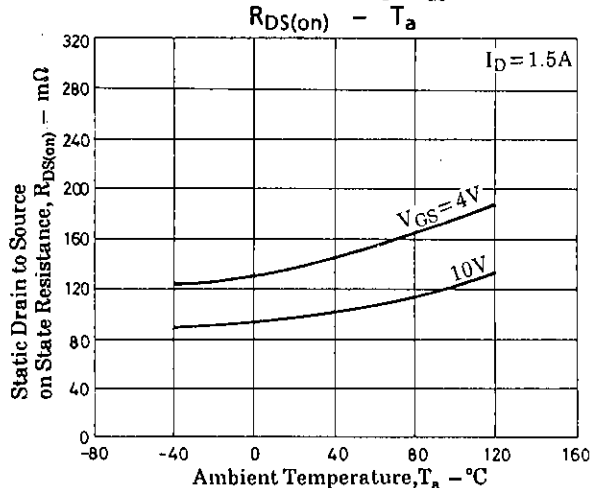
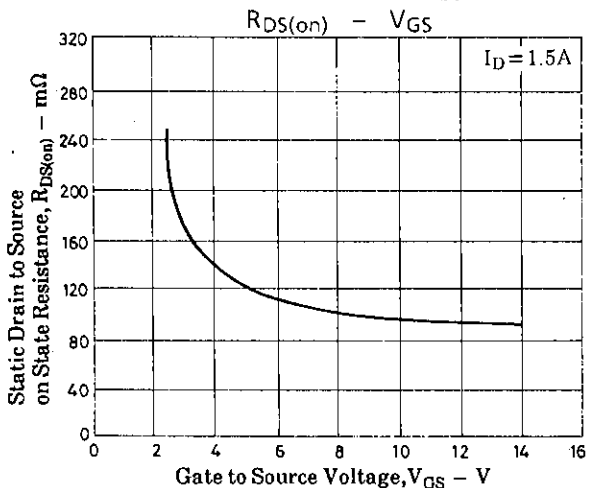
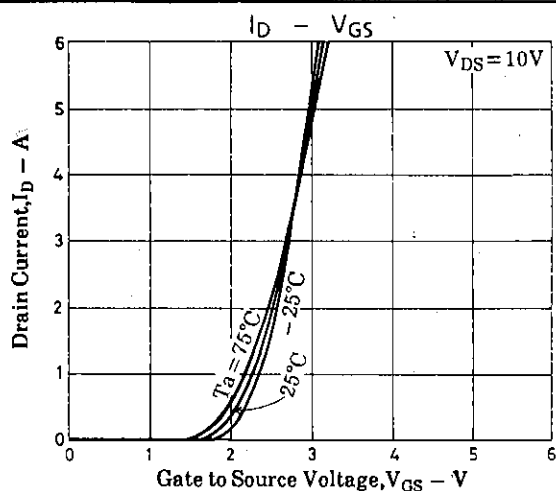
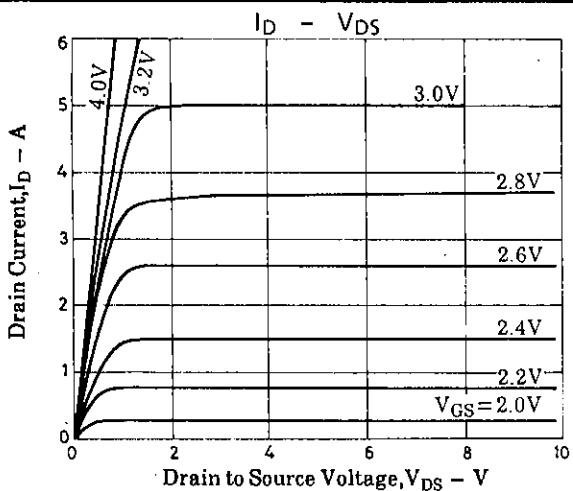
Switching Time Test Circuit

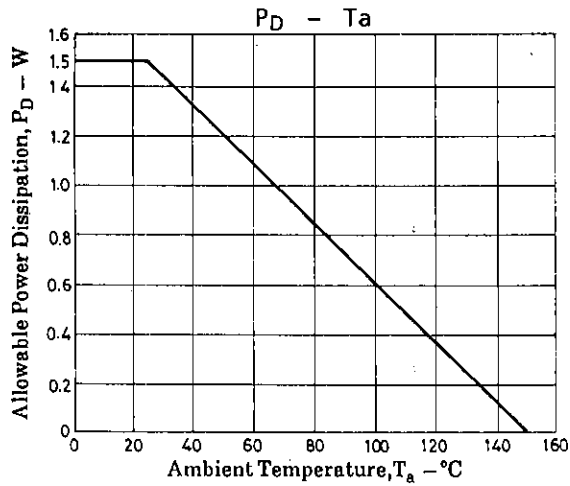


Package Dimensions 2085

(unit: mm)







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