

SANYO

No.3825

2SK1730

N-Channel MOS Silicon FET

Very High-Speed
Switching Applications**Features**

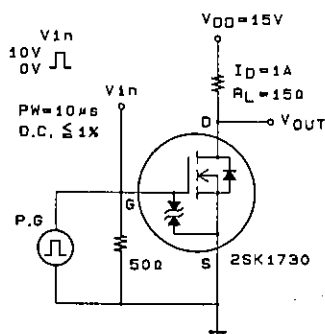
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Meets radial tapping.

Absolute Maximum Ratings at Ta = 25°C

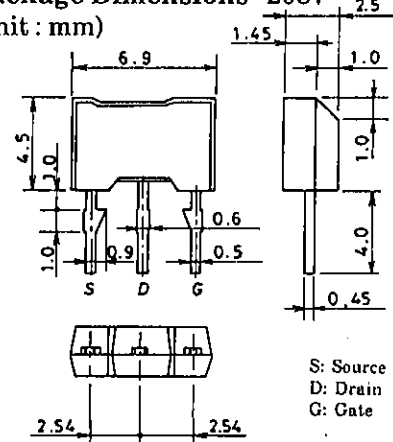
			unit
Drain to Source Voltage	V _{DSS}	30	V
Gate to Source Voltage	V _{GSS}	±15	V
Drain Current(DC)	I _D	1.8	A
Drain Current(Pulse)	I _{DP}	7.2	A
Allowable Power Dissipation	P _D	1	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

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
Zero Gate Voltage	I _{DSS}	V _{DS} = 30V, V _{GS} = 0			100	μA
Drain Current						
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 = 1A	1.2	2.0		S
Static Drain to Source	R _{DS(on)}	I _D = 1A, V _{GS} = 10V		0.2	0.30	Ω
on State Resistance	R _{DS(on)}	I _D = 1A, V _{GS} = 4V		0.3	0.45	Ω
Input Capacitance	C _{iss}	V _{DS} = 10V, f = 1MHz		170		pF
Output Capacitance	C _{oss}	V _{DS} = 10V, f = 1MHz		100		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 10V, f = 1MHz		30		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		7		ns
Rise Time	t _r	∕		11		ns
Turn-OFF Delay Time	t _{d(off)}	∕		60		ns
Fall Time	t _f	∕		25		ns
Diode Forward Voltage	V _{SD}	I _S = 1.8A, V _{GS} = 0		0.9		V

Switching Time Test Circuit**Package Dimensions 2087**

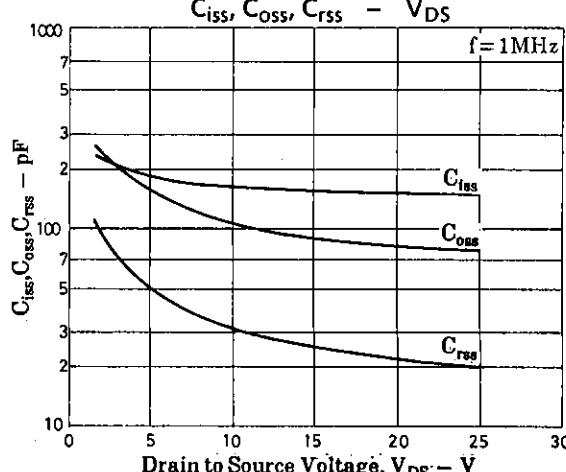
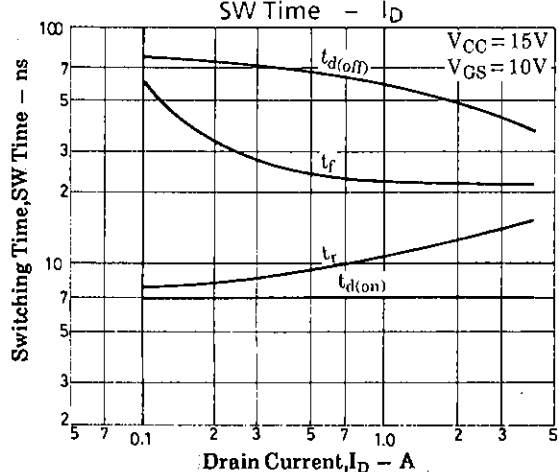
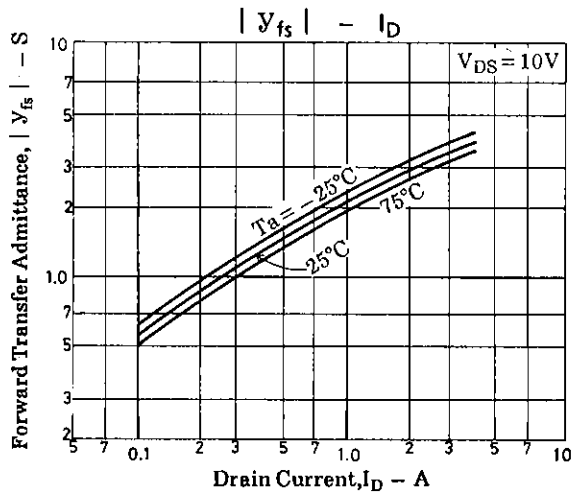
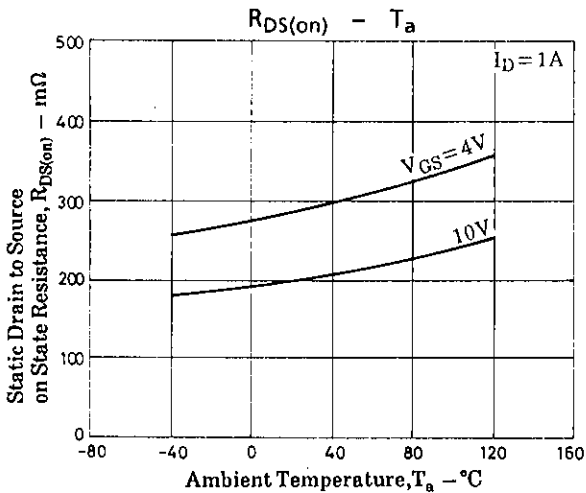
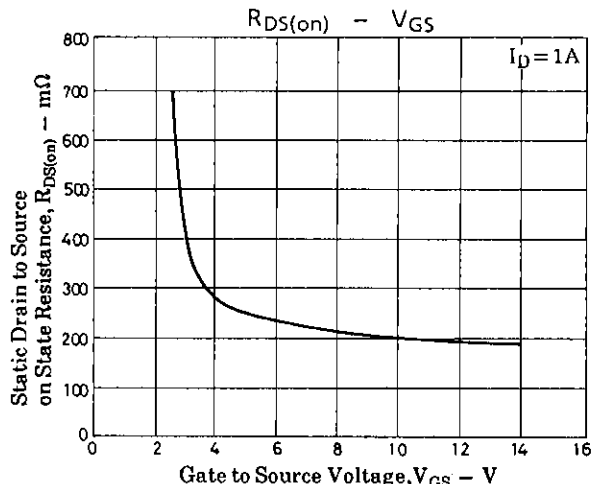
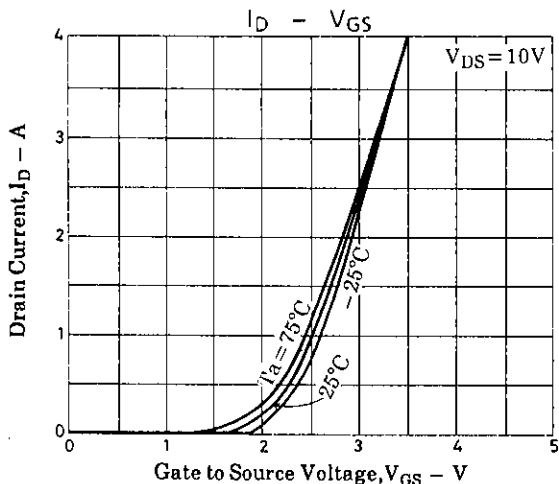
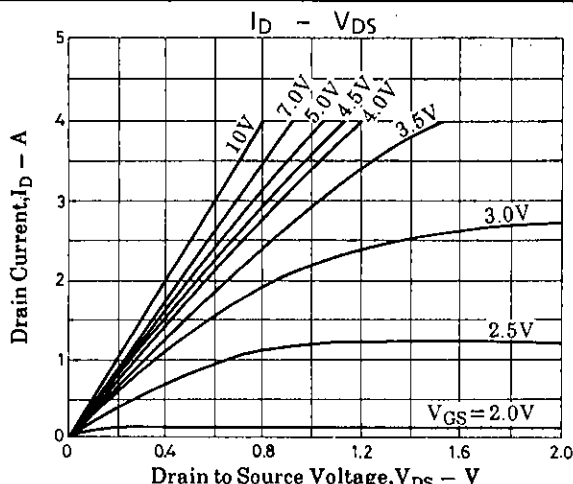
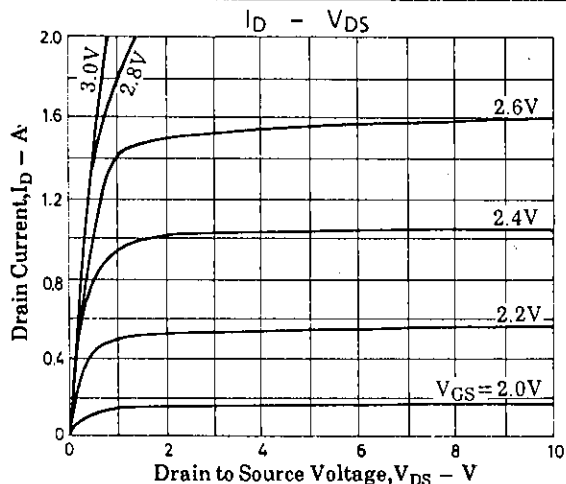
(unit : mm)

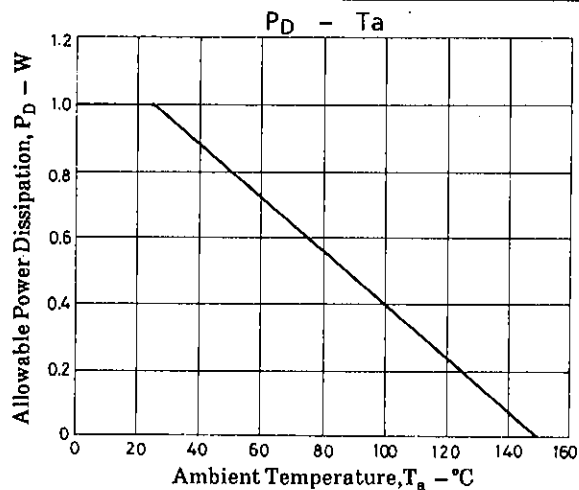
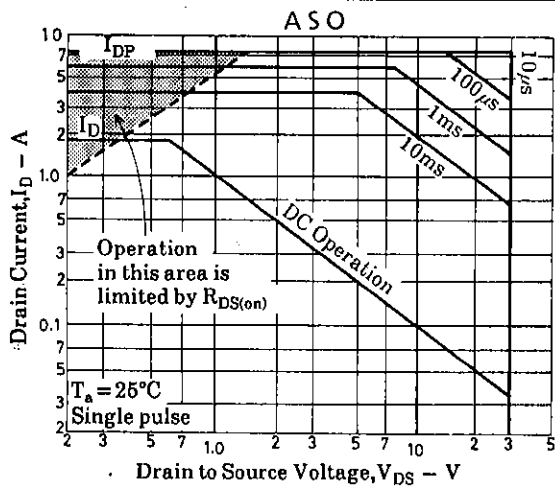
S: Source
D: Drain
G: Gate

SANYO: NMP

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