

<b>SANYO</b>	No.3825	<h1 style="margin: 0;">2SK1730</h1> <p style="margin: 0;">N-Channel MOS Silicon FET</p> <p style="margin: 0;">Very High-Speed Switching Applications</p>
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**Features**

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

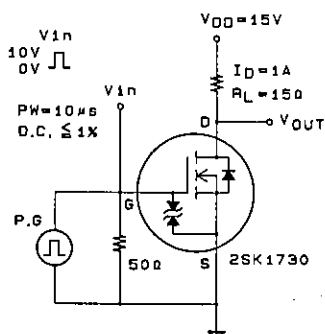
**Absolute Maximum Ratings at Ta = 25°C**

			unit
Drain to Source Voltage	$V_{DSS}$	30	V
Gate to Source Voltage	$V_{GSS}$	$\pm 15$	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

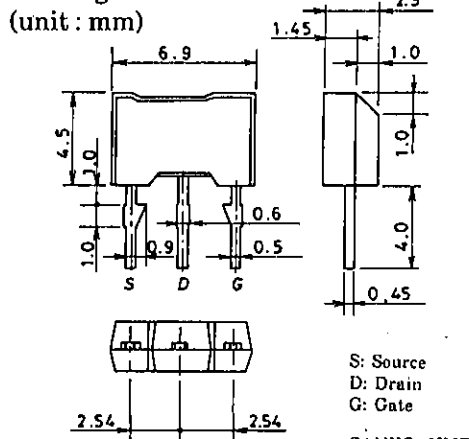
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	30			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 30V, V_{GS} = 0$			100	$\mu A$
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 12V, V_{DS} = 0$			$\pm 10$	$\mu A$
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 on State Resistance	$R_{DS(on)}$	$I_D = 1A, V_{GS} = 10V$		0.2	0.30	$\Omega$
	$R_{DS(on)}$	$I_D = 1A, V_{GS} = 4V$		0.3	0.45	$\Omega$
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

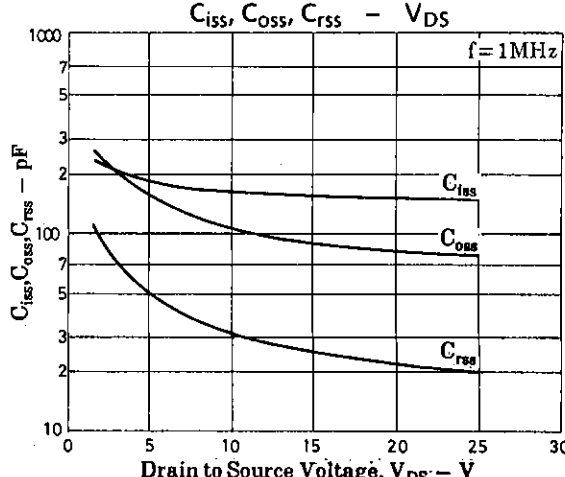
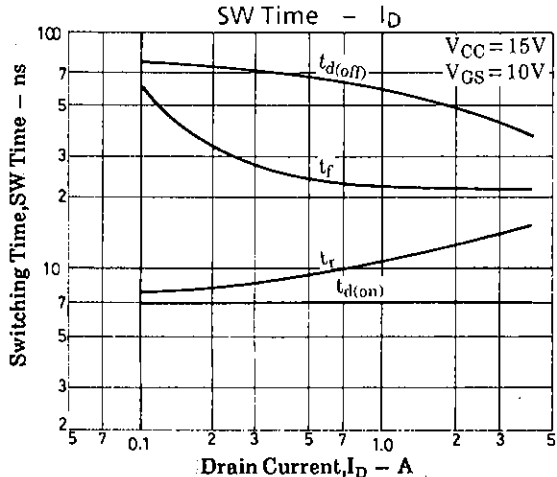
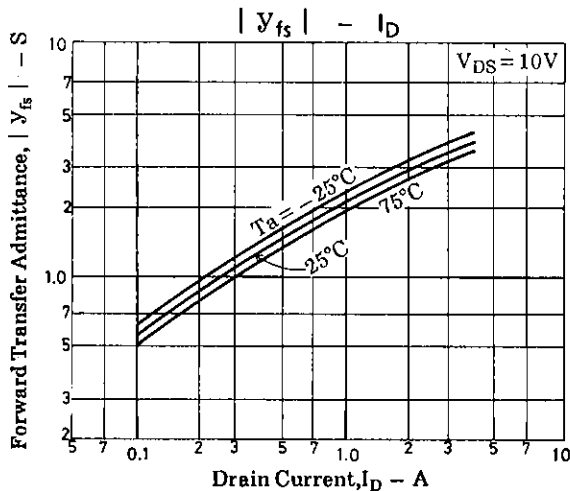
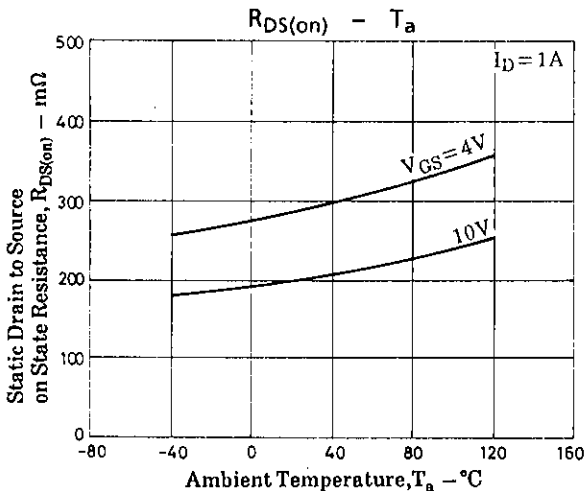
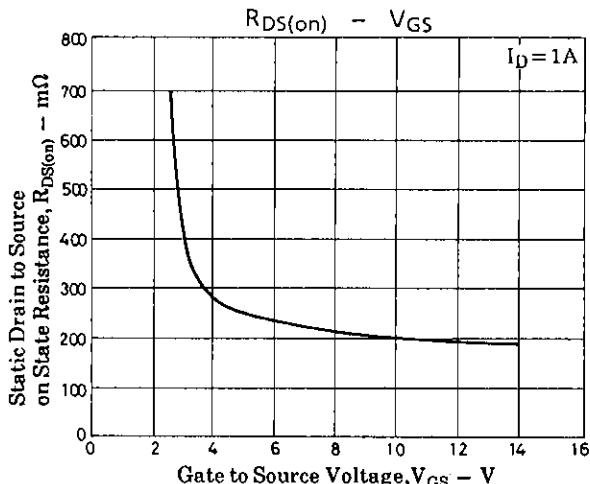
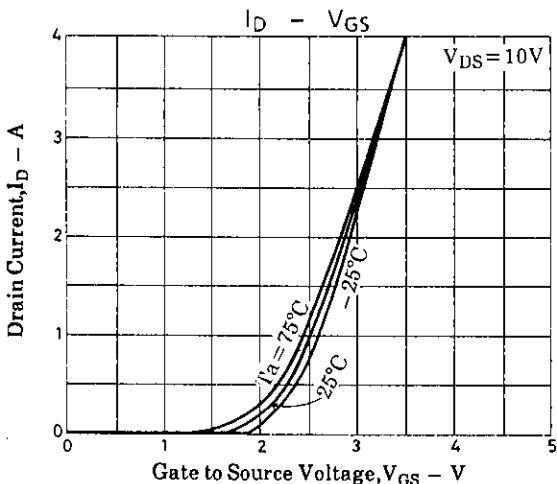
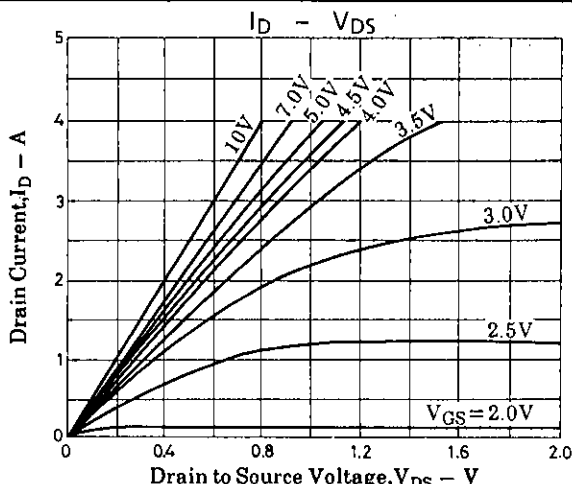
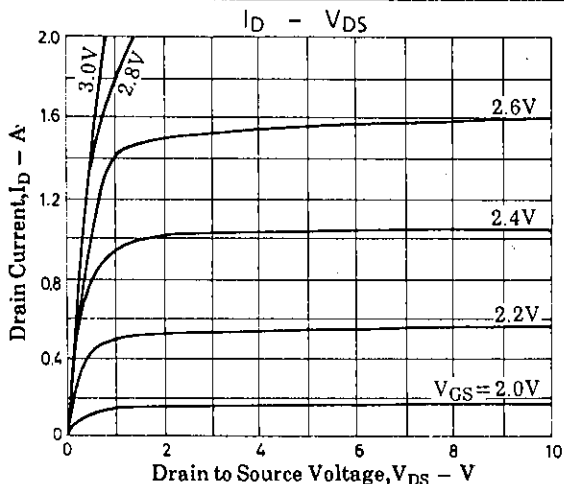
**Switching Time Test Circuit**

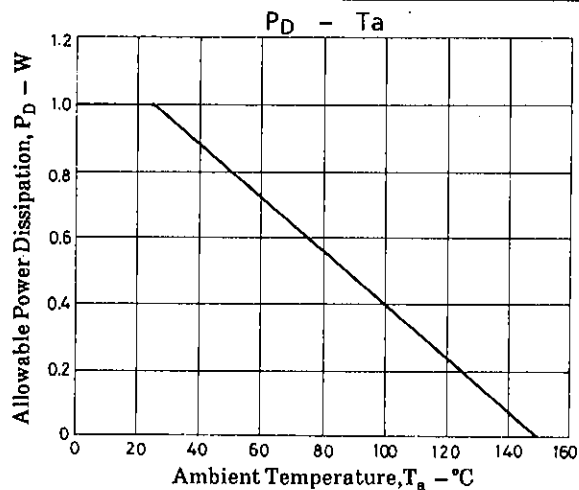
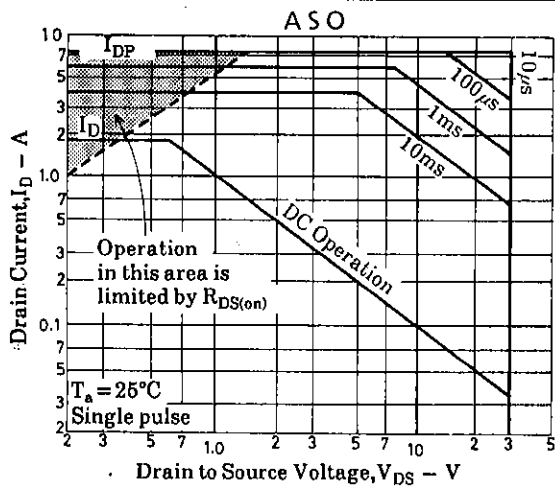


**Package Dimensions 2087**



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





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