

<b>SANYO</b>	No.3819	<b>2SK1724</b>
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

**Features**

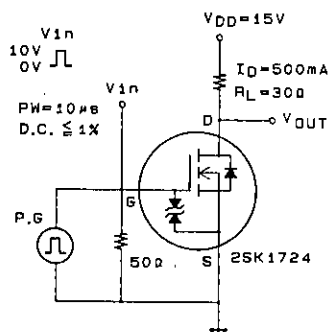
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.

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

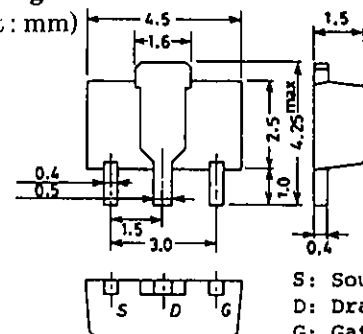
			unit
Drain to Source Voltage	$V_{DS}$	30	V
Gate to Source Voltage	$V_{GS}$	$\pm 15$	V
Drain Current(DC)	$I_D$	1	A
Drain Current(Pulse)	$I_{DP}$	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	A
Allowable Power Dissipation	$P_D$	$T_c = 25^\circ C$ Mounted on ceramic board (250mm <sup>2</sup> × 0.8mm)	3.5 1.3 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	$I_{DSS}$	$V_{DS} = 30V, V_{GS} = 0$			10	$\mu A$
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} $	$V_{DS} = 10V, I_D = 500mA$	0.6	1.0		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = 500mA, V_{GS} = 10V$		0.5	0.75	$\Omega$
	$R_{DS(on)}$	$I_D = 500mA, V_{GS} = 4V$		0.75	1.1	$\Omega$
Input Capacitance	$C_{iss}$	$V_{DS} = 10V, f = 1MHz$		50		pF
Output Capacitance	$C_{oss}$	$V_{DS} = 10V, f = 1MHz$		35		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 10V, f = 1MHz$		10		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	$V_{SD}$	$I_S = 1A, V_{GS} = 0$		1.0		V

**Switching Time Test Circuit****Package Dimensions 2062**

(unit: mm)

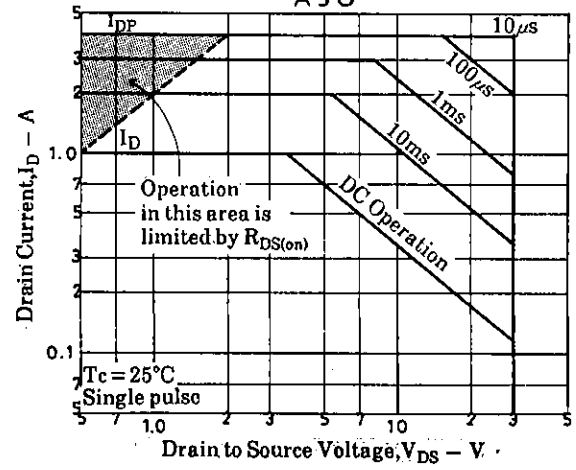
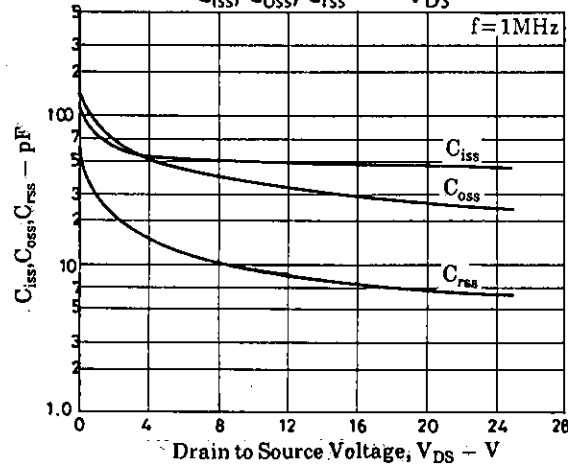
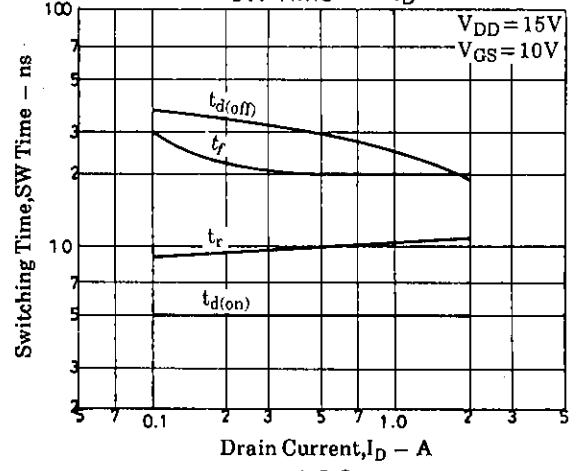
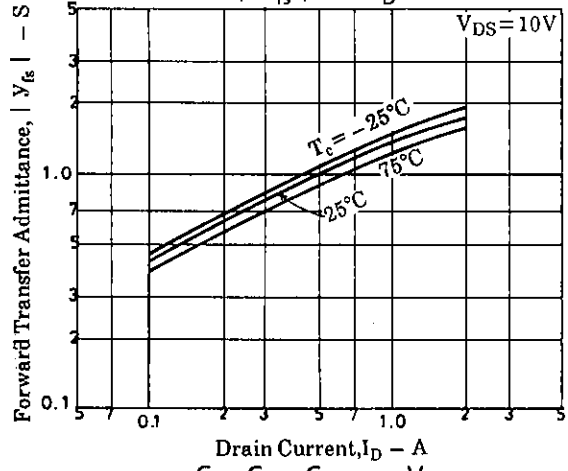
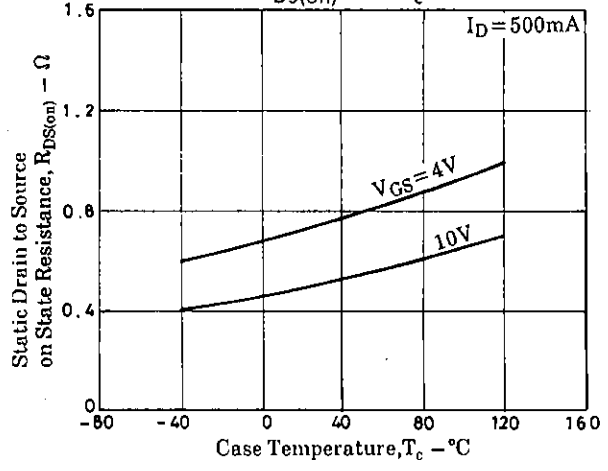
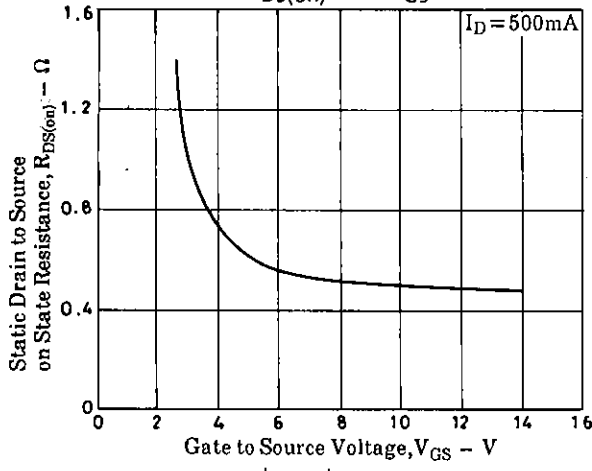
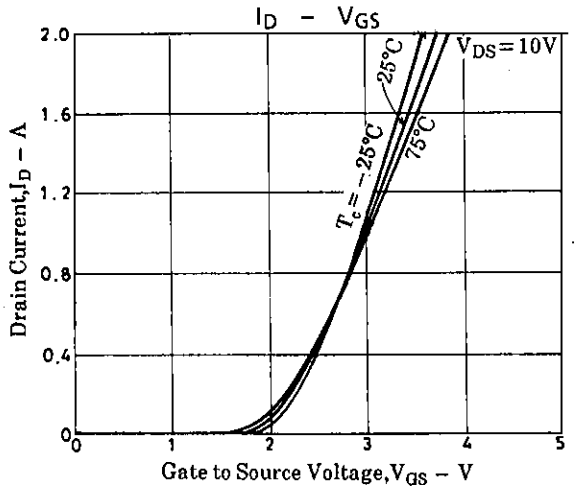
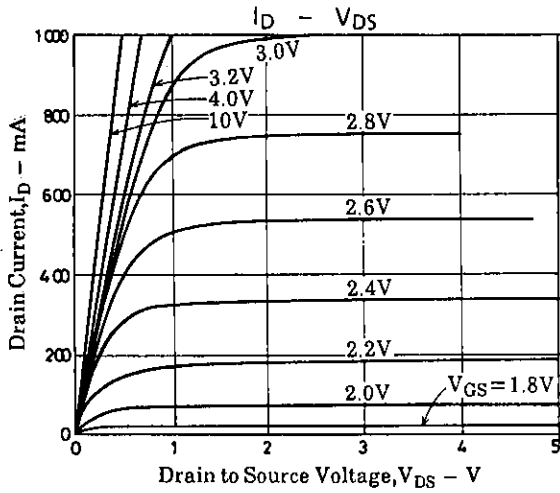


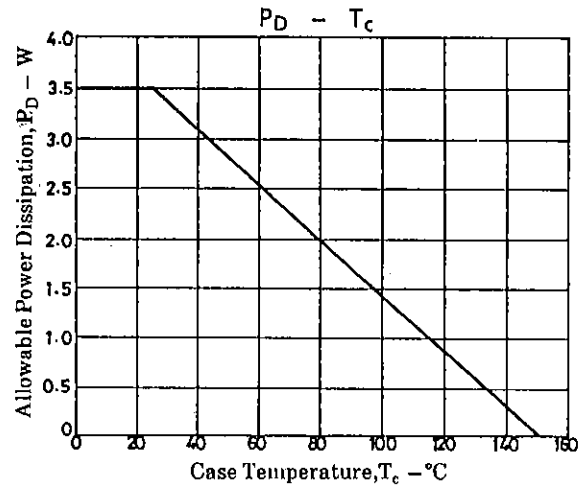
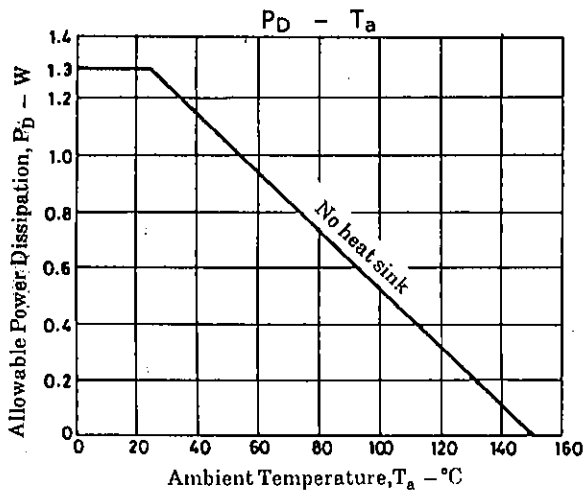
S: Source  
D: Drain  
G: Gate

SANYO: PCP

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