

**SANYO**

No.3771A

**2SK1470**

N-Channel MOS Silicon FET

Very High-Speed  
Switching Applications**Features**

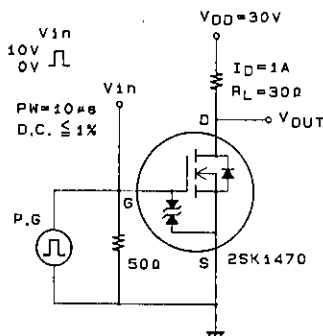
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.

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

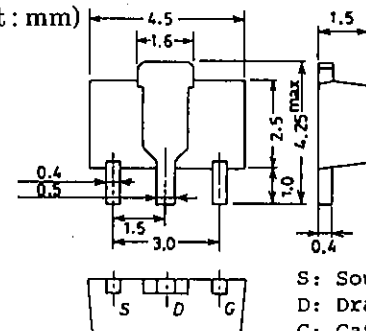
			unit
Drain to Source Voltage	V <sub>DS</sub>	60	V
Gate to Source Voltage	V <sub>GS</sub>	±15	V
Drain Current(DC)	I <sub>D</sub>	2	A
Drain Current(Pulse)	I <sub>DP</sub>	PW ≤ 10 μs, duty cycle ≤ 1%	8 A
Allowable Power Dissipation	P <sub>D</sub>	T <sub>c</sub> = 25°C	3.5 W
		Mounted on ceramic board (250mm <sup>2</sup> × 0.8mm)	1.5 W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

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

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = 1mA, V <sub>GS</sub> = 0	60			V
Zero Gate Voltage	I <sub>DSS</sub>	V <sub>DS</sub> = 60V, V <sub>GS</sub> = 0			100	μA
Drain Current	I <sub>DSS</sub>	V <sub>GS</sub> = ±12V, V <sub>DS</sub> = 0			±10	μA
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1mA	1.0		2.0	V
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1A	1.2	2.0		S
Forward Transfer Admittance	Y <sub>fs</sub>	I <sub>D</sub> = 1A, V <sub>GS</sub> = 10V	0.35	0.45		Ω
Static Drain to Source	R <sub>DS(on)</sub>	I <sub>D</sub> = 1A, V <sub>GS</sub> = 4V	0.45	0.6		Ω
on State Resistance	R <sub>DS(on)</sub>	V <sub>DS</sub> = 20V, f = 1MHz				pF
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 20V, f = 1MHz				pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 20V, f = 1MHz				pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 20V, f = 1MHz				pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.		6		ns
Rise Time	t <sub>r</sub>	"		10		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"		60		ns
Fall Time	t <sub>f</sub>	"		20		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = 2A, V <sub>GS</sub> = 0	1.0			V

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

(unit: mm)

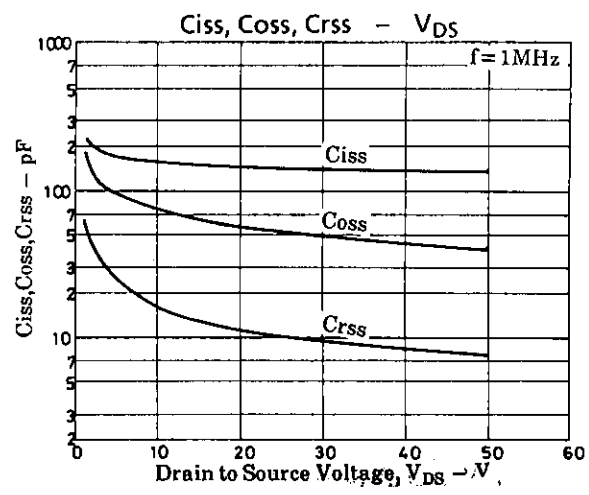
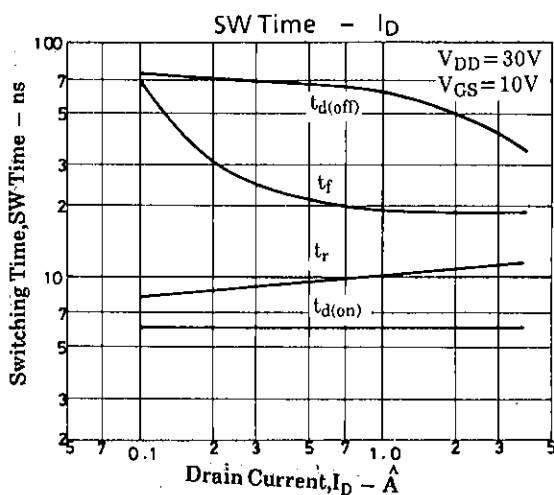
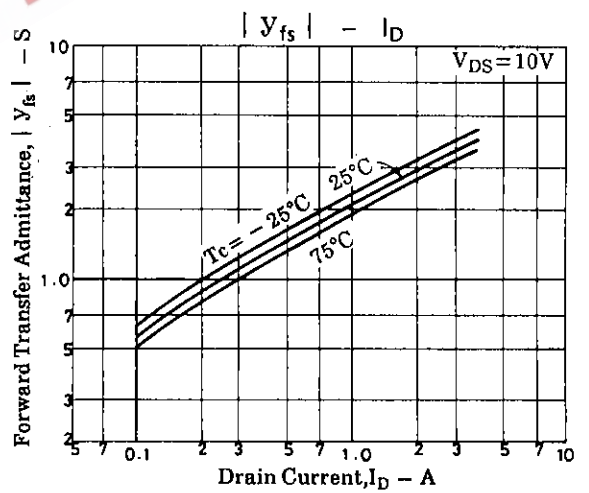
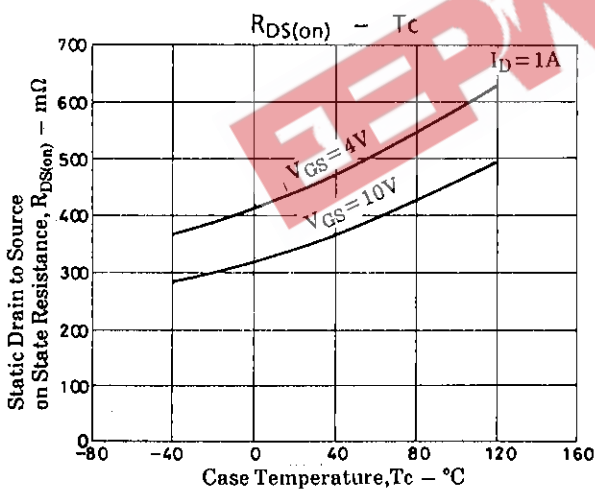
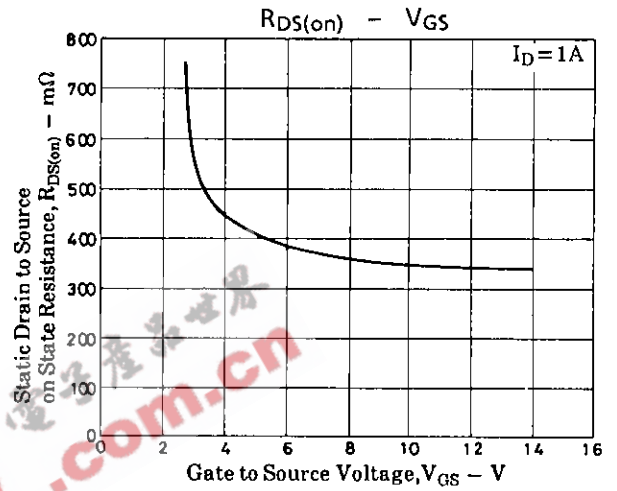
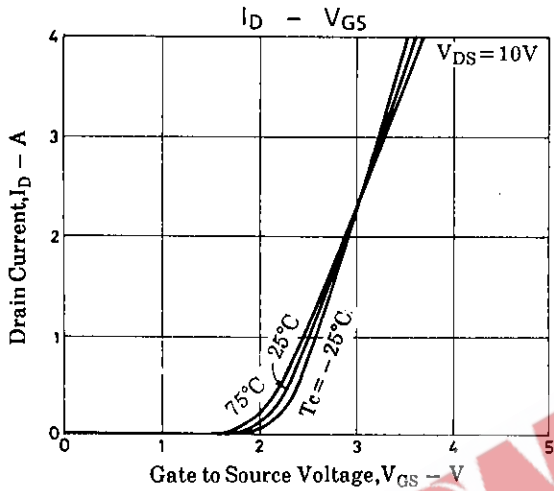
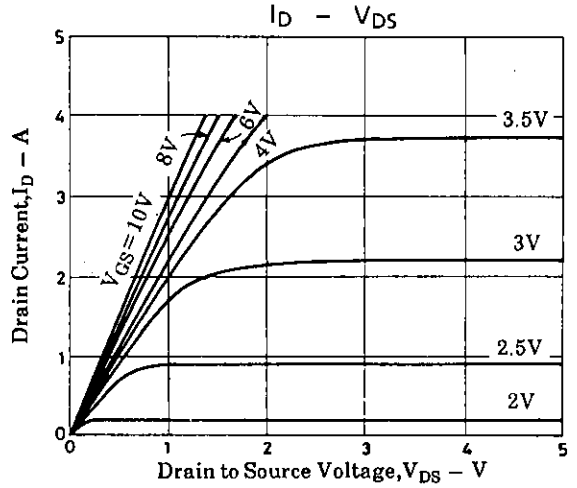
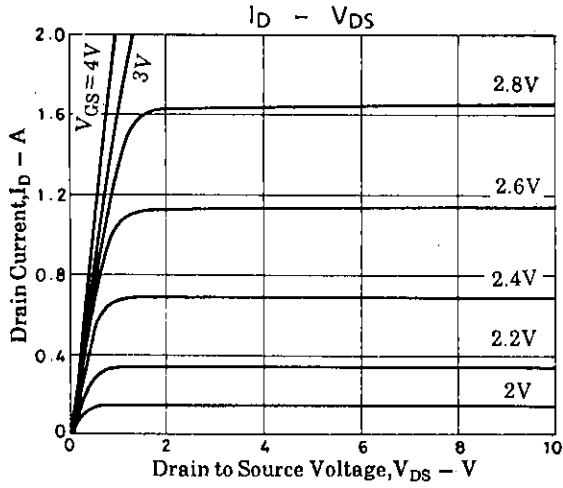


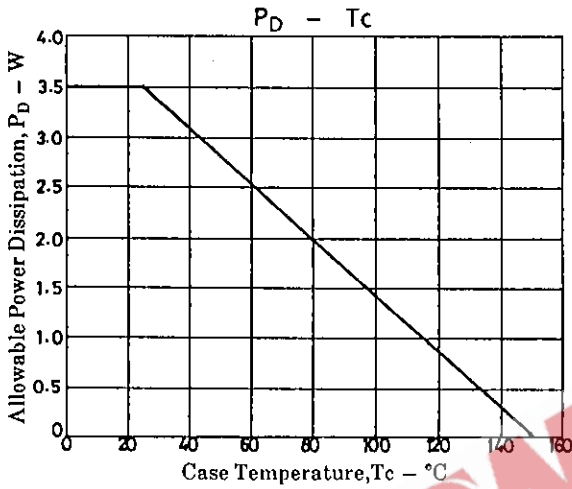
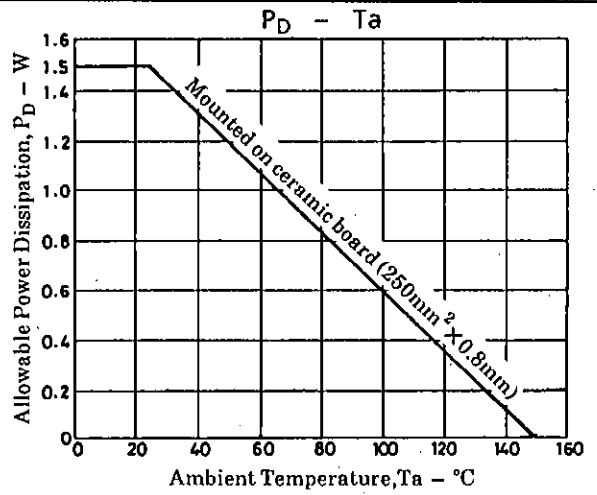
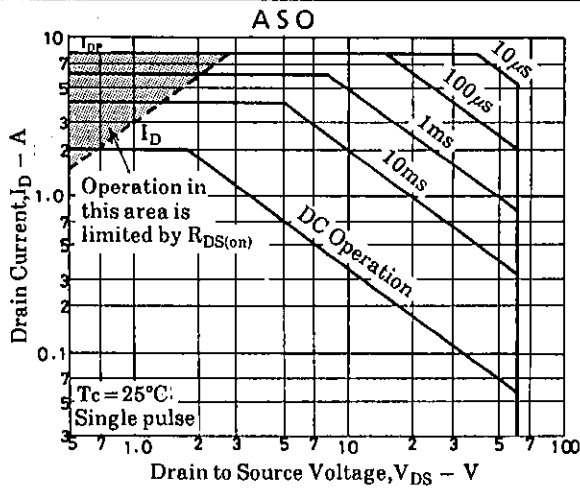
S: Source  
D: Drain  
G: Gate

SANYO: PCP

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