

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.

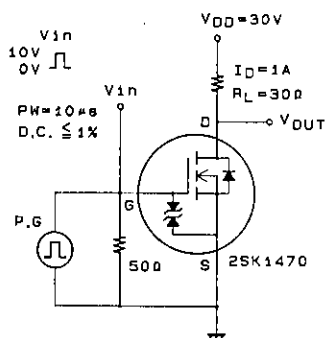
Absolute Maximum Ratings at Ta = 25°C

			unit	
Drain to Source Voltage	V _{DSS}	60	V	
Gate to Source Voltage	V _{GSS}	±15	V	
Drain Current(DC)	I _D	2	A	
Drain Current(Pulse)	I _{DP}	8	A	
Allowable Power Dissipation	P _D	PW ≤ 10μs, duty cycle ≤ 1%	3.5	W
		Tc = 25°C Mounted on ceramic board (250mm ² × 0.8mm)	1.5	W
Channel Temperature	T _{ch}	150	°C	
Storage Temperature	T _{stg}	-55 to +150	°C	

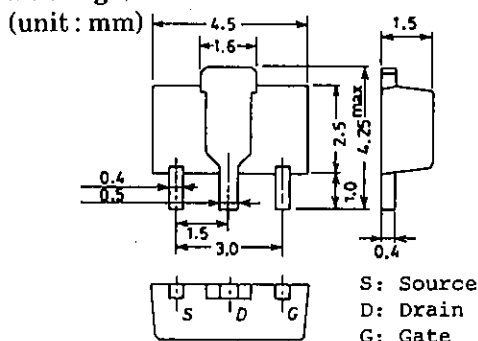
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	60			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 60V, 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 = 1A	1.2	2.0		S
Static Drain to Source on State Resistance	R _{DS(on)}	I _D = 1A, V _{GS} = 10V		0.35	0.45	Ω
	R _{DS(on)}	I _D = 1A, V _{GS} = 4V		0.45	0.6	Ω
Input Capacitance	C _{iss}	V _{DS} = 20V, f = 1MHz		150		pF
Output Capacitance	C _{oss}	V _{DS} = 20V, f = 1MHz		60		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 20V, f = 1MHz		12		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		6		ns
Rise Time	t _r	∕		10		ns
Turn-OFF Delay Time	t _{d(off)}	∕		60		ns
Fall Time	t _f	∕		20		ns
Diode Forward Voltage	V _{SD}	I _S = 2A, V _{GS} = 0		1.0		V

Switching Time Test Circuit

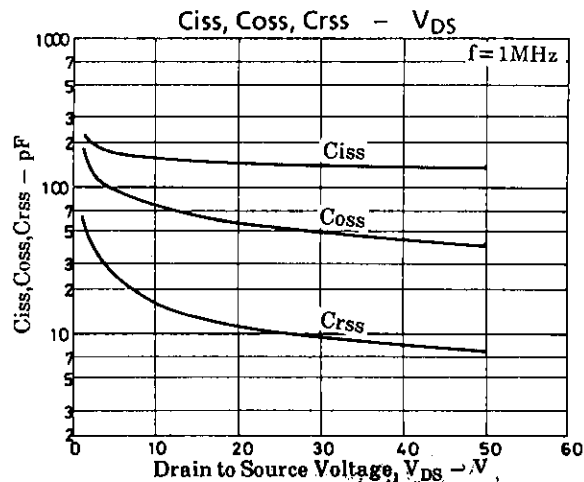
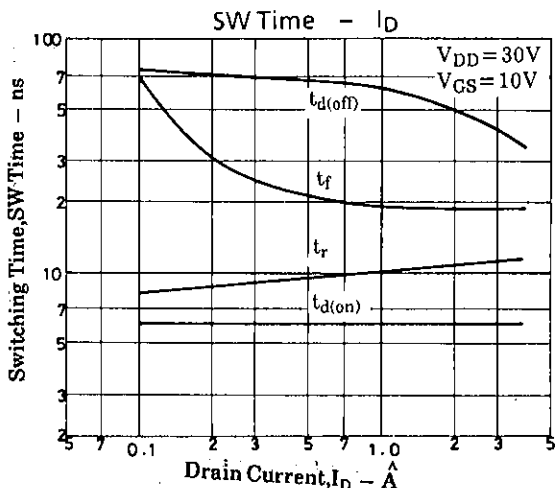
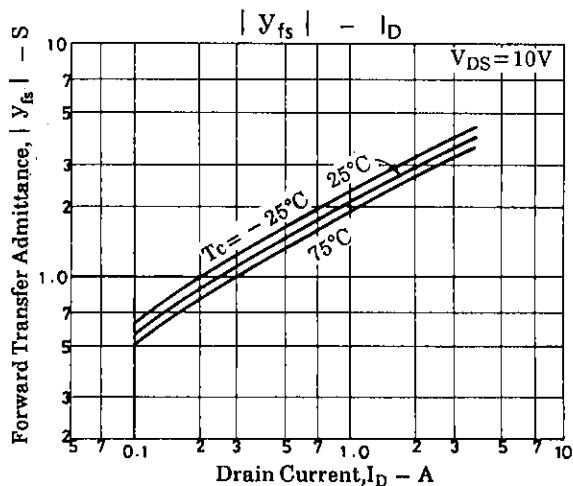
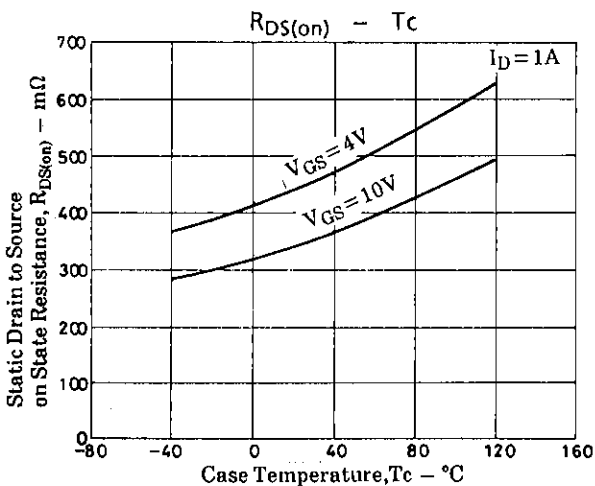
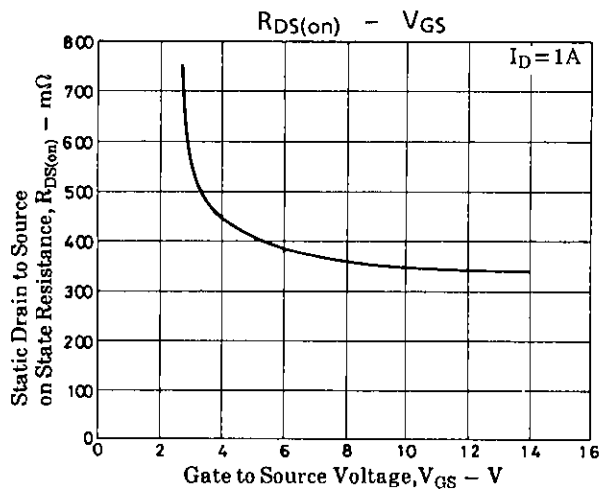
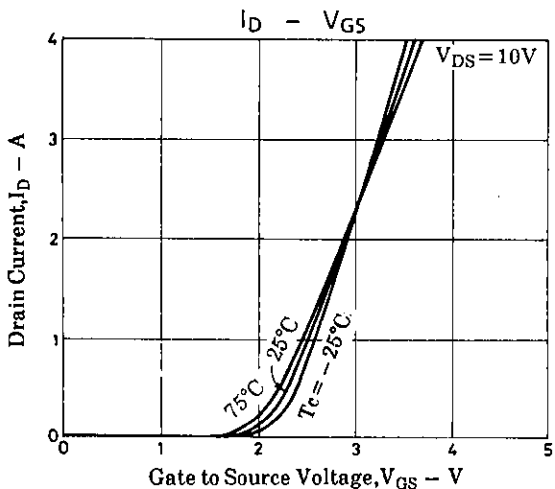
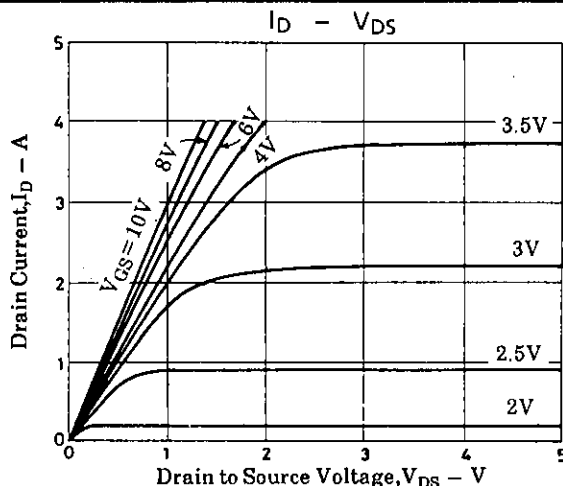
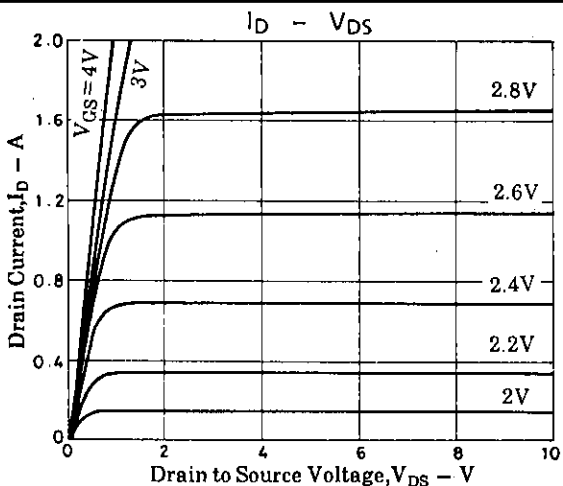


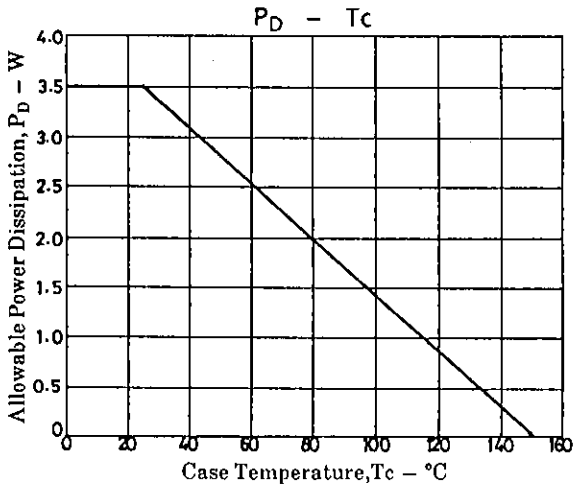
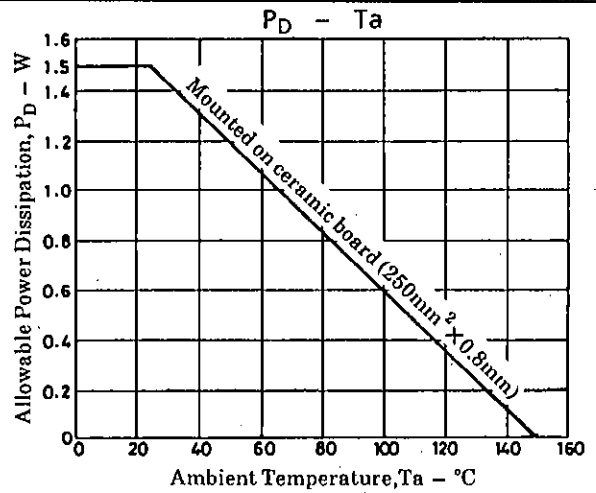
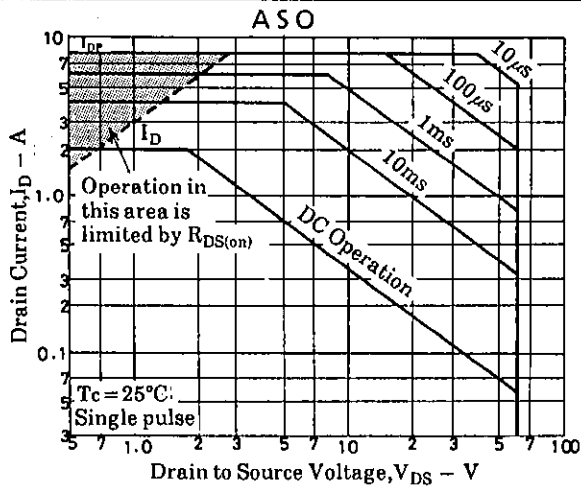
Package Dimensions 2062



S: Source
D: Drain
G: Gate

SANYO: PCP





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