

<b>SANYO</b>	No.4631	<b>2SK2167</b>
		N-Channel MOS Silicon FET

**Very High-Speed Switching Applications**

**Features**

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

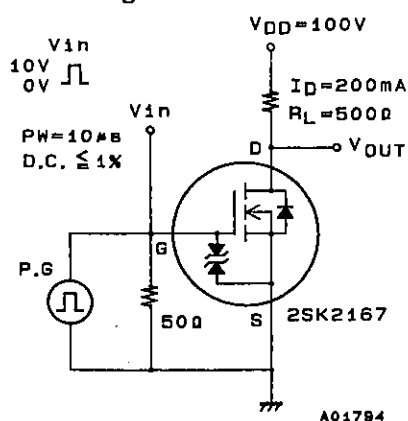
**Absolute Maximum Ratings at Ta = 25°C**

Drain-to-Source Voltage	$V_{DSS}$	250	V	unit
Gate-to-Source Voltage	$V_{GSS}$	$\pm 20$	V	
Drain Current (DC)	$I_D$	400	mA	
Drain Current (Pulse)	$I_{DP}$	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	1.6	A
Allowable Power Dissipation	$P_D$	$T_c = 25^\circ C$	3.5	W
		Mounted on ceramic board (250mm <sup>2</sup> × 0.8mm)	1.3	W
Channel Temperature	$T_{ch}$	150	°C	
Storage Temperature	$T_{stg}$	-55 to +150	°C	

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

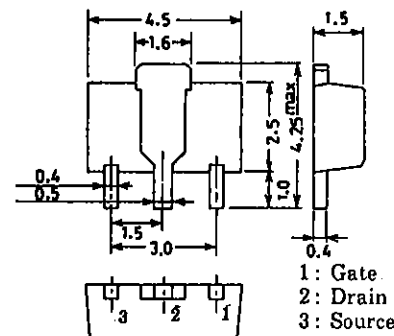
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	250			V
Zero-Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 250V, V_{GS} = 0$			100	$\mu A$
Gate-to-Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 18V, V_{DS} = 0$			$\pm 10$	$\mu A$
Gate-to-Source Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	1.5		2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, I_D = 200mA$	270	400		mS
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D = 200mA, V_{GS} = 10V$		8	12	$\Omega$
Input Capacitance	$C_{iss}$	$V_{DS} = 20V, f = 1MHz$		37		pF
Output Capacitance	$C_{oss}$	$V_{DS} = 20V, f = 1MHz$		10		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 20V, f = 1MHz$		4		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		10		ns
Rise Time	$t_r$	"		10		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		35		ns
Fall Time	$t_f$	"		45		ns
Diode Forward Voltage	$V_{SD}$	$I_S = 400mA, V_{GS} = 0$		1.0		V

**Switching Time Test Circuit**



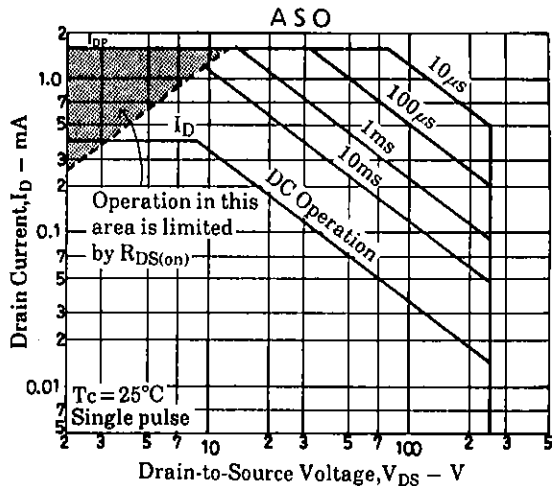
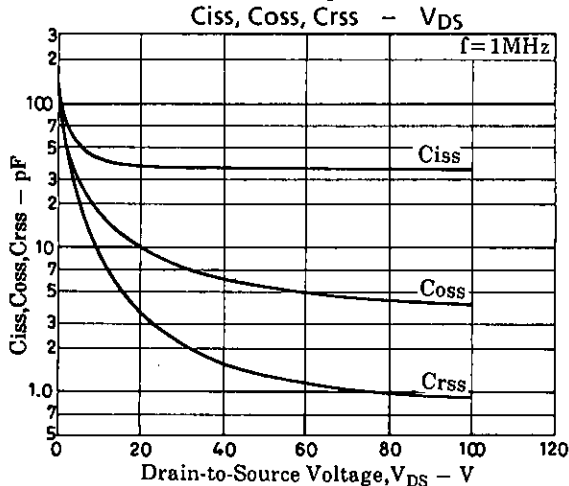
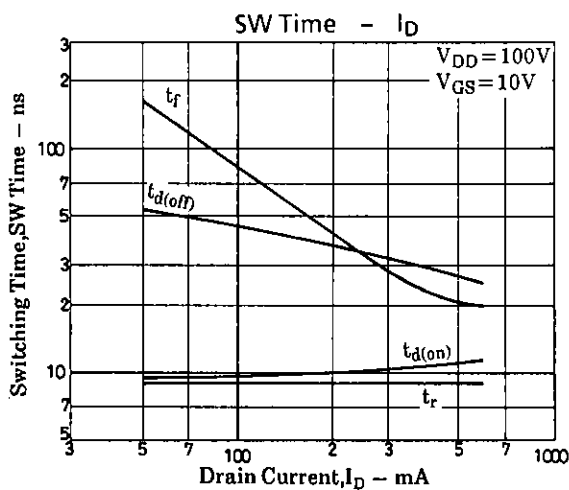
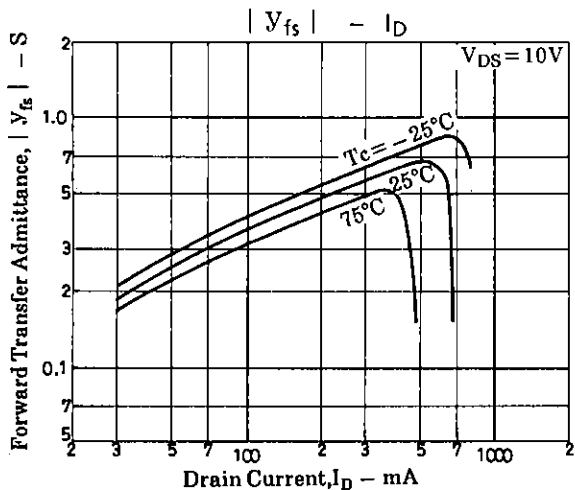
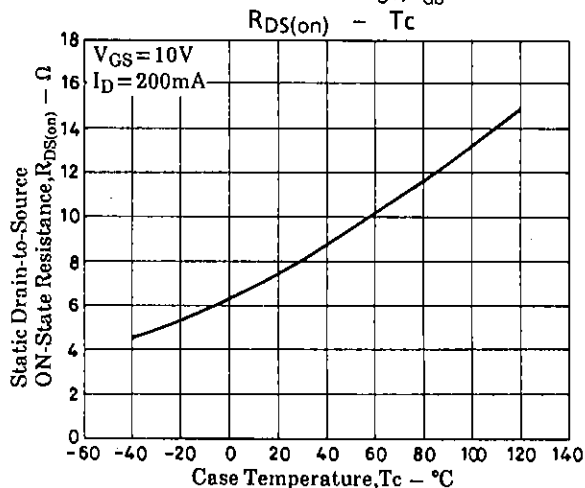
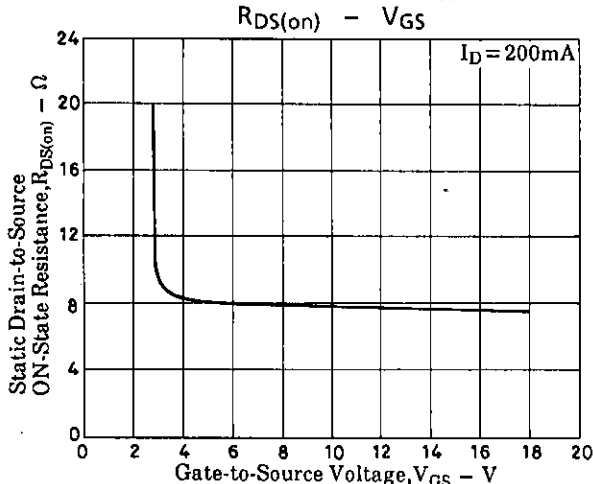
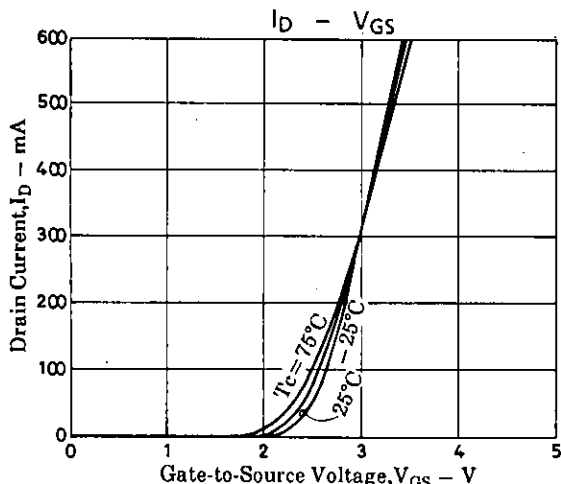
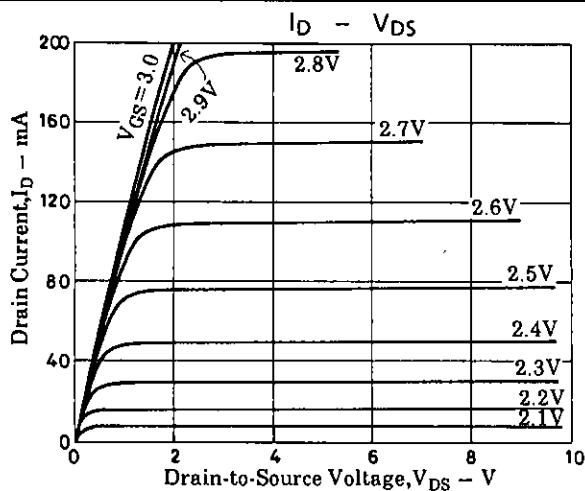
**Package Dimensions 2062A**

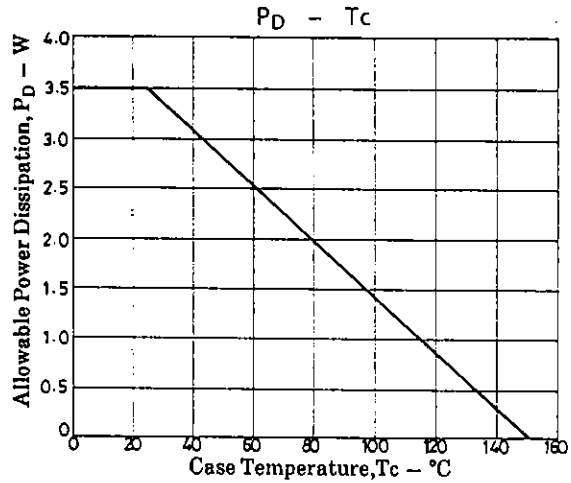
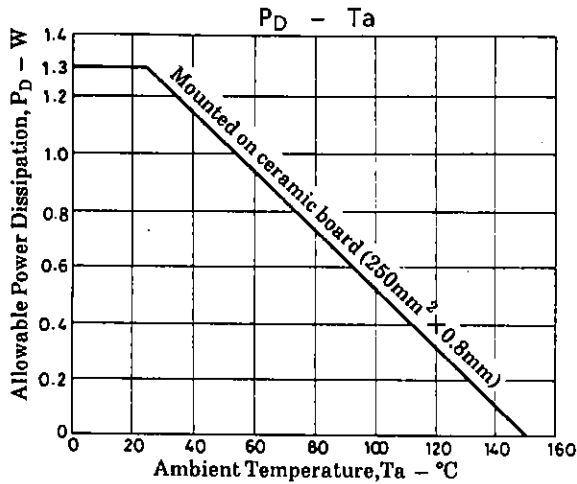
(unit : mm)



SANYO:PCP  
(Bottom View)

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