

**2SJ416**

## Ultrahigh-Speed Switching Applications

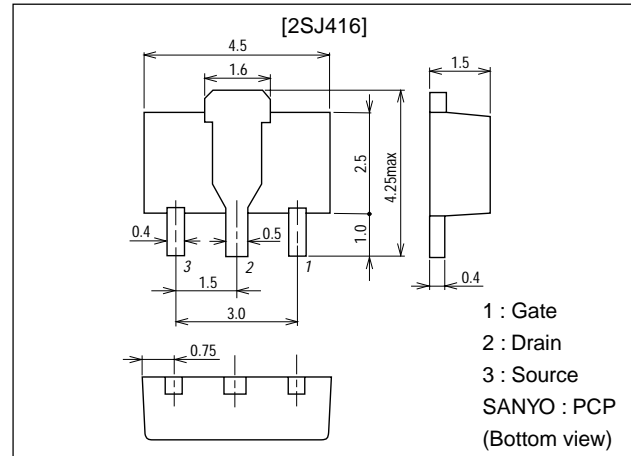
### Features

- Low ON-resistance.
- Ultrahigh-speed switching.
- 4V drive.

### Package Dimensions

unit:mm

2062A



### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	$V_{DS}$		-30	V
Gate-to-Source Voltage	$V_{GS}$		±20	V
Drain Current (DC)	$I_D$		-2	A
Drain Current (Pulse)	$I_{DP}$	$PW \leq 10\mu s$ , duty cycle $\leq 1\%$	-8	A
Allowable Power Dissipation	$P_D$	Mounted on ceramic board (250mm <sup>2</sup> ×0.8mm)	1.5	W
		$T_c = 25^\circ C$	3.5	W
Channel Temperature	$T_{ch}$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	$C_{iss}$	$V_{DS} = -10V$ , $f = 1MHz$		170	440	pF
Output Capacitance	$C_{oss}$	$V_{DS} = -10V$ , $f = 1MHz$		120	650	pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = -10V$ , $f = 1MHz$		30		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		10		ns
Rise Time	$t_r$	See specified Test Circuit		20		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		110		ns
Fall Time	$t_f$	See specified Test Circuit		75		ns
Diode Forward Voltage	$V_{SD}$	$I_S = -2A$ , $V_{GS} = 0$		-1.0	-1.2	V

Marking : JJ

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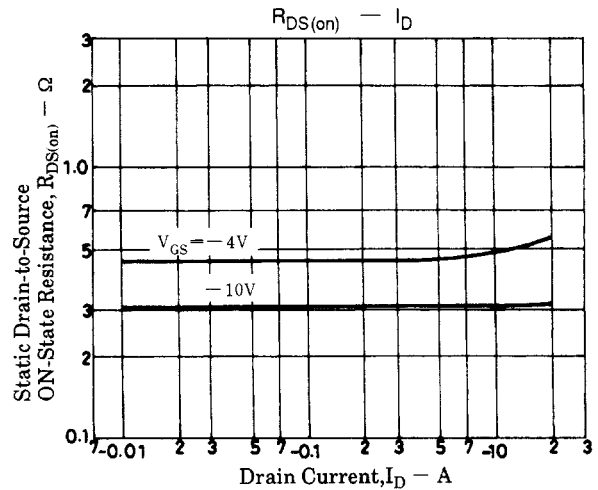
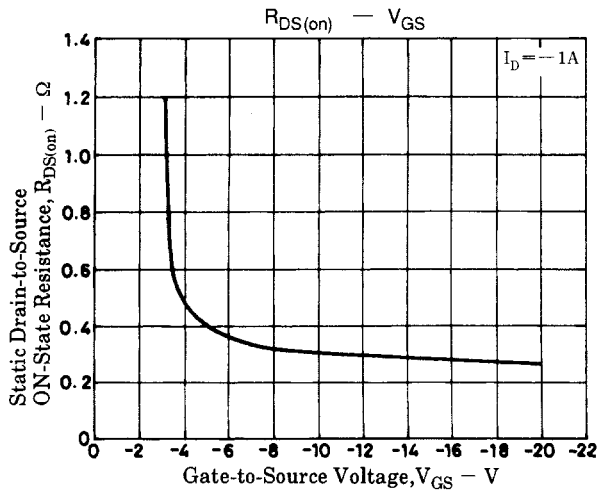
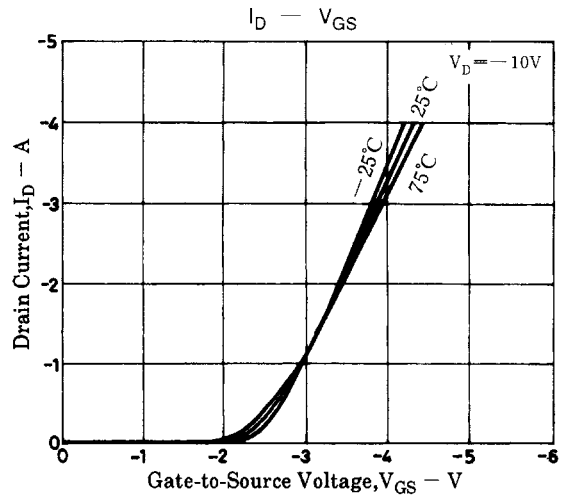
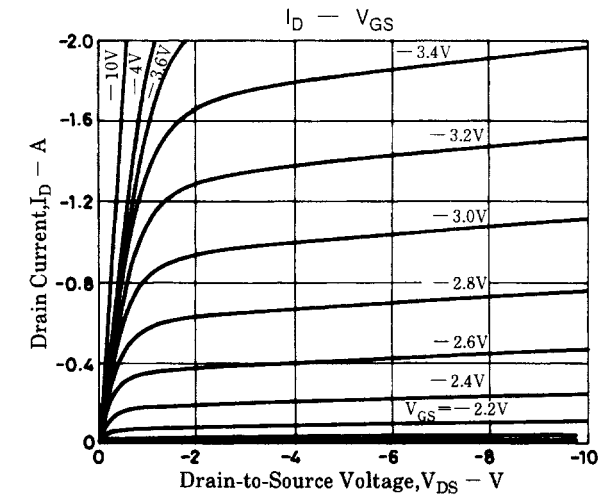
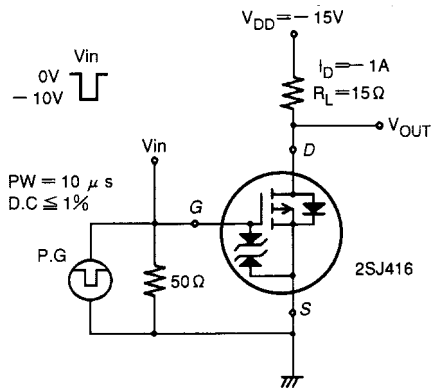
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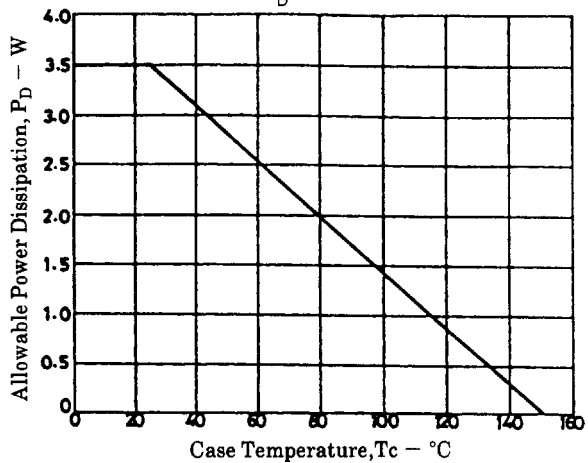
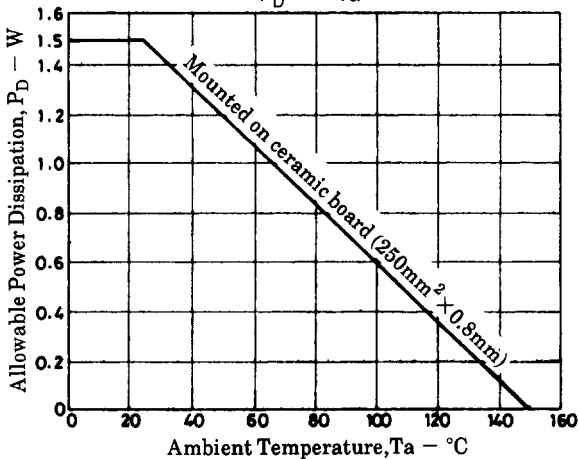
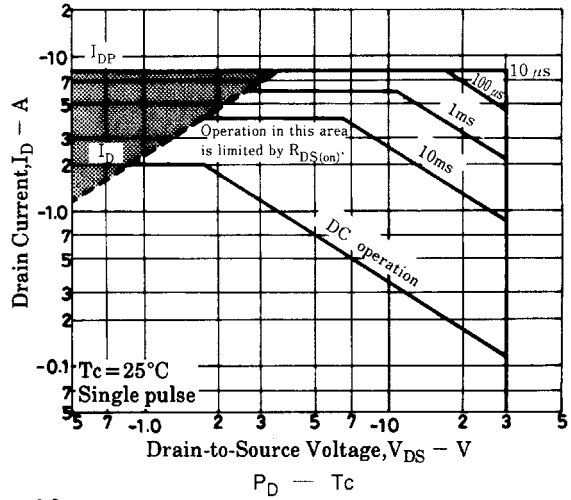
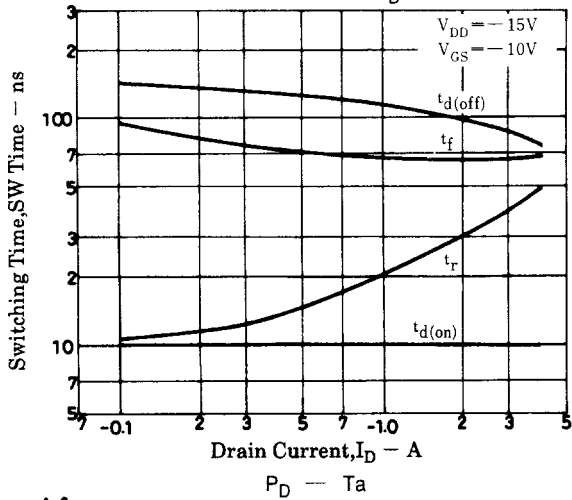
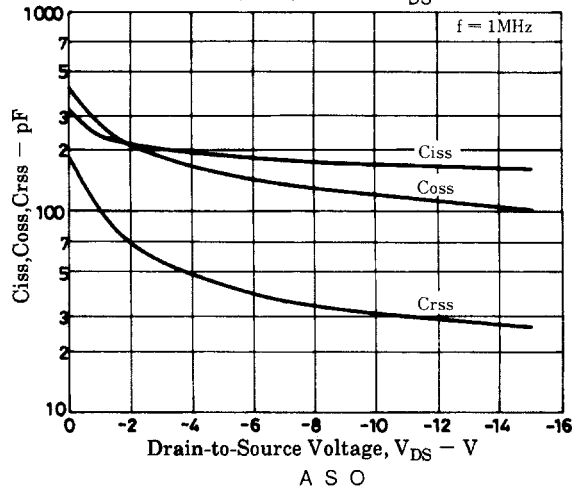
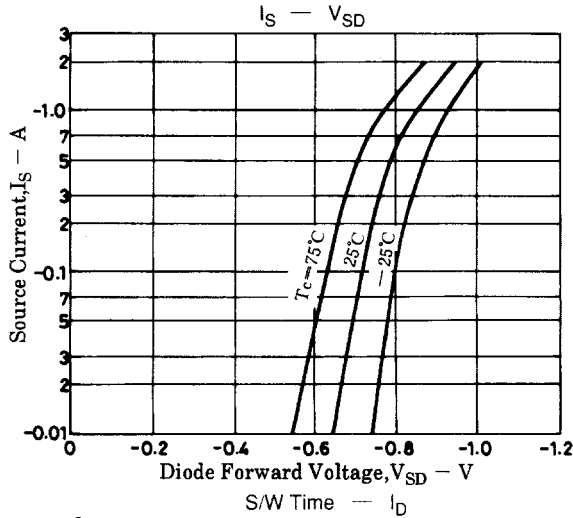
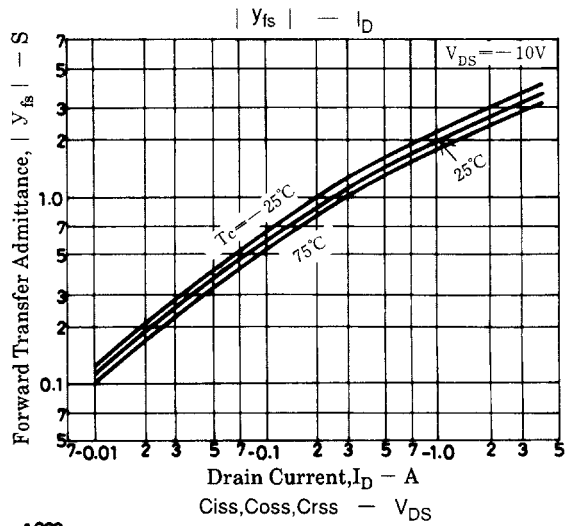
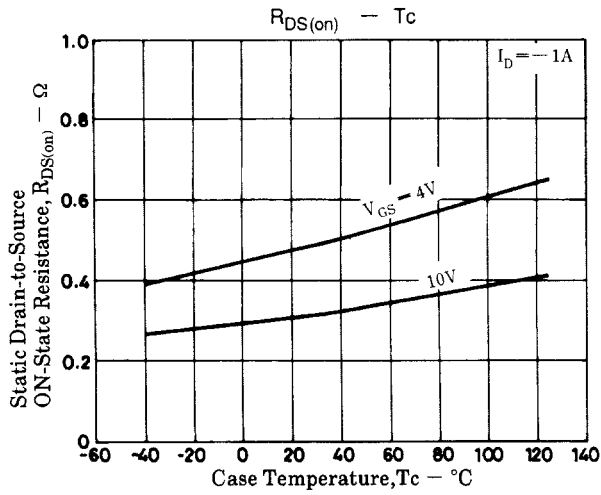
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## Switching Time Test Circuit



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