

SANYO

No.5058

2SK2317

N-Channel Silicon MOSFET

Very High-Speed
Switching Applications**Features**

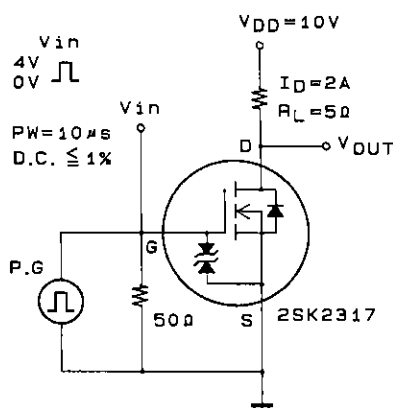
- Low ON resistance.
- Very high-speed switching.
- 2.5V drive.

Absolute Maximum Ratings at Ta=25°C

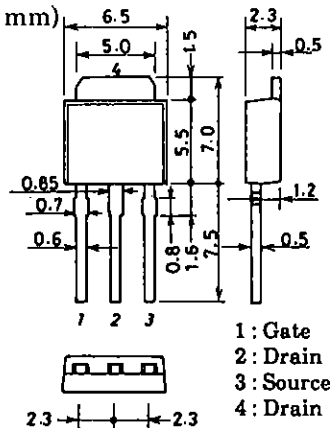
Drain-to-Source Voltage	V_{DSS}	20	V	
Gate-to-Source Voltage	V_{GSS}	± 10	V	
Drain Current(DC)	I_D	4	A	
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	16	A
Allowable Power Dissipation	P_D	1	W	
		$T_c = 25^\circ C$	20	W
Channel Temperature	T_{ch}	150	$^\circ C$	
Storage Temperature	T_{stg}	$-55 \text{ to } +150$	$^\circ C$	

Electrical Characteristics at Ta=25°C

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA, V_{GS} = 0$	20			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 16V, V_{GS} = 0$			100	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 8V, V_{DS} = 0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1mA$	0.5		1.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 10V, I_D = 2A$	3.5	5		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D = 2A, V_{GS} = 4V$		65	85	m Ω
ON-State Resistance	$R_{DS(on)}$	$I_D = 1A, V_{GS} = 2.5V$		85	125	m Ω
Input Capacitance	C_{iss}	$V_{DS} = 10V, f = 1MHz$		400		pF
Output Capacitance	C_{oss}	$V_{DS} = 10V, f = 1MHz$		300		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 10V, f = 1MHz$		160		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		20		ns
Rise Time	t_r	"		70		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		100		ns
Fall Time	t_f	"		120		ns
Diode Forward Voltage	V_{SD}	$I_S = 4A, V_{GS} = 0$	1.0	1.2		V

Switching Time Test Circuit**Package Dimensions 2083B**

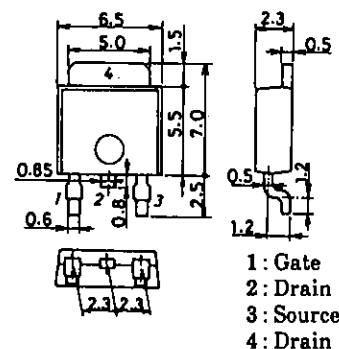
(unit: mm)



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Package Dimensions 2092B

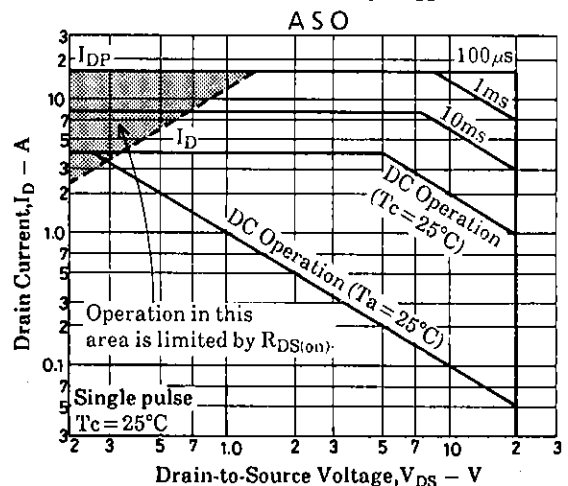
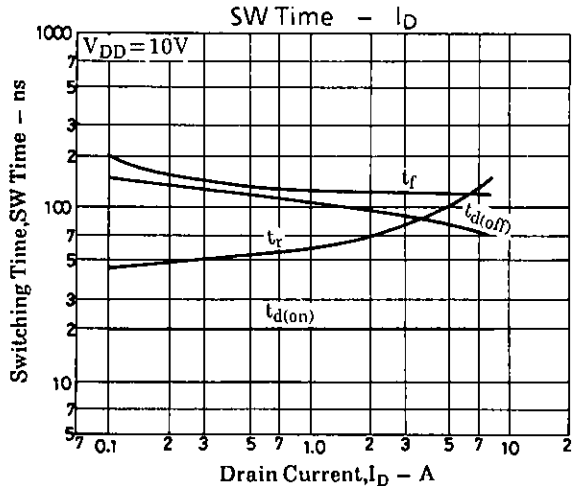
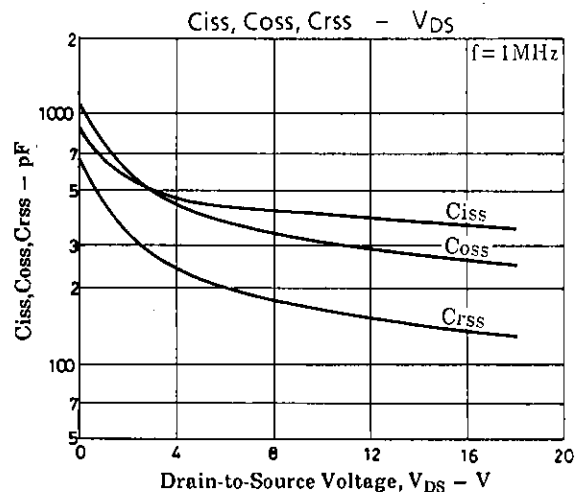
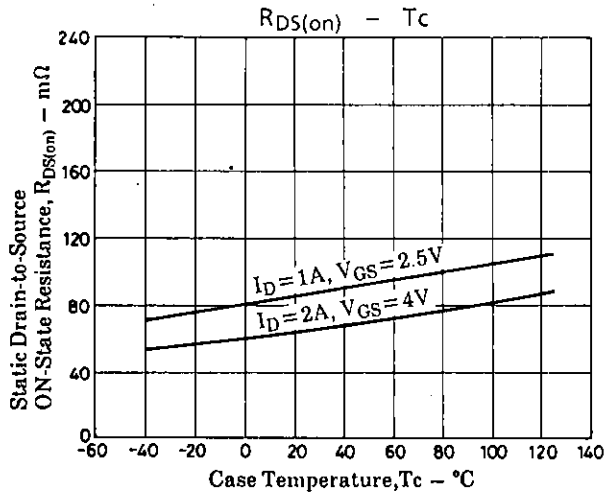
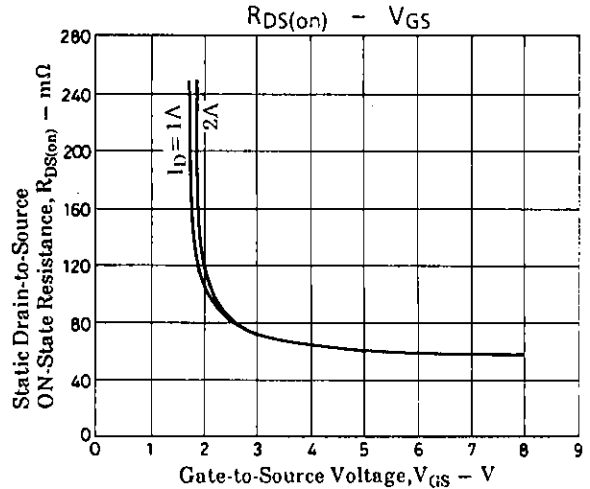
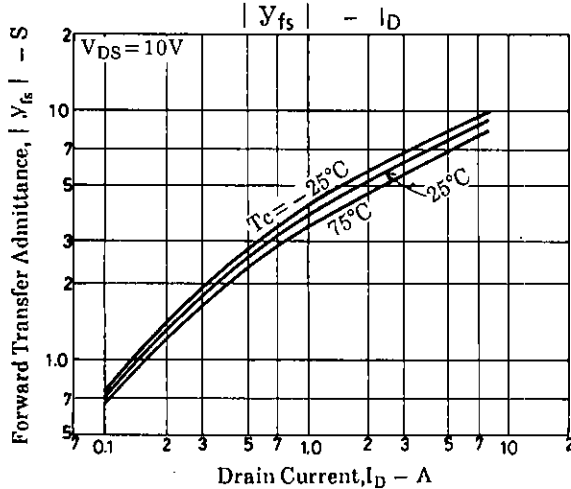
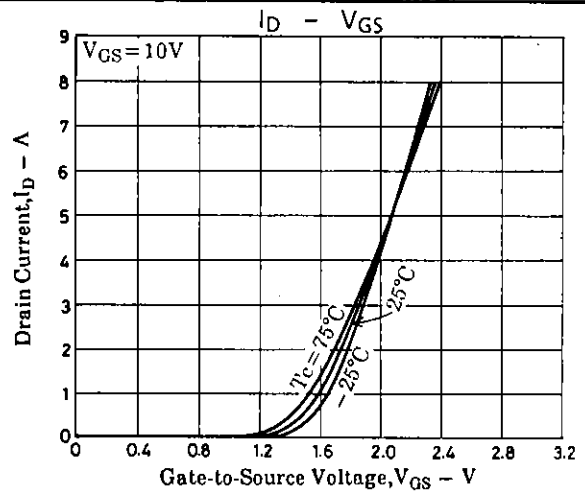
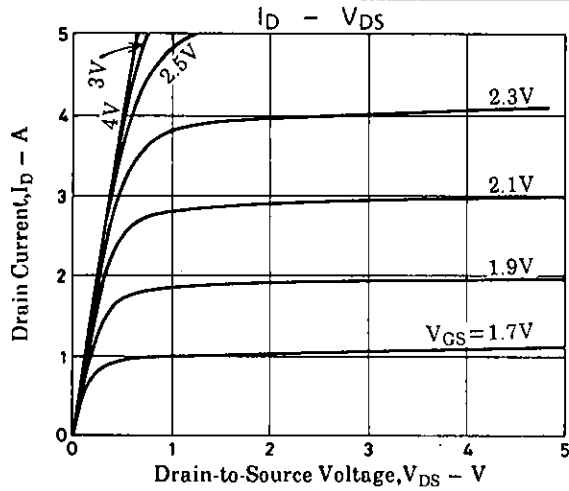
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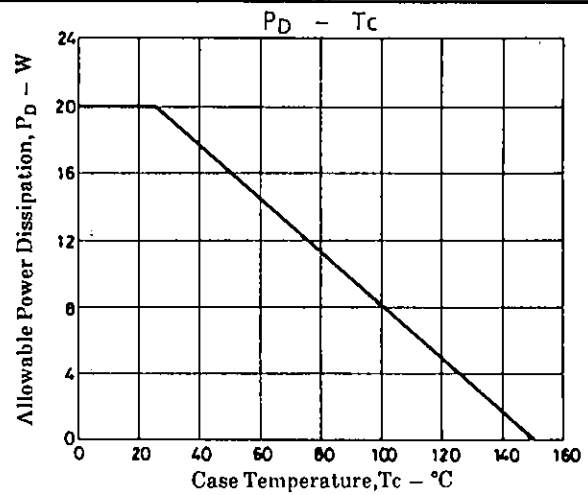
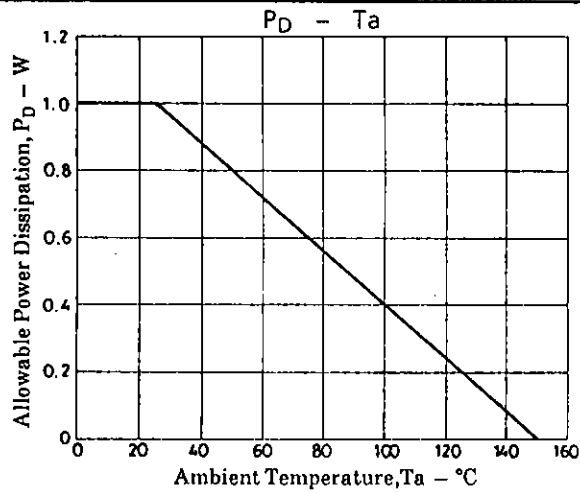


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