

SANYO	No.5058	2SK2317
		N-Channel Silicon MOSFET Very High-Speed Switching Applications

Features

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

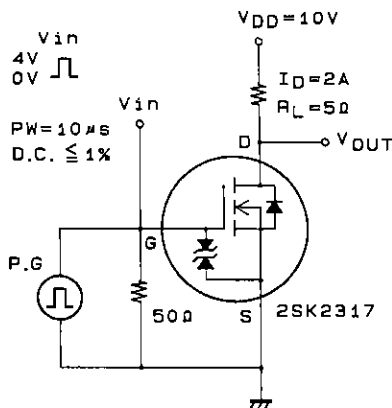
Absolute Maximum Ratings at Ta = 25°C

			unit
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 ≤ 10μs, duty cycle ≤ 1%	16 A
Allowable Power Dissipation	P _D	1	W
		Tc = 25°C	20 W
Channel Temperature	Tch	150	°C
Storage Temperature	Tstg	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

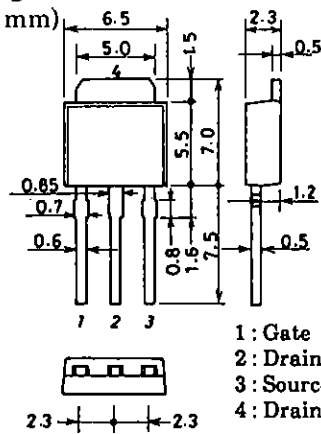
			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	20			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = 16V, V _{GS} = 0			100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±8V, V _{DS} = 0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1mA	0.5		1.5	V
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	mΩ
ON-State Resistance	R _{DS(on)}	I _D = 1A, V _{GS} = 2.5V		85	125	mΩ
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

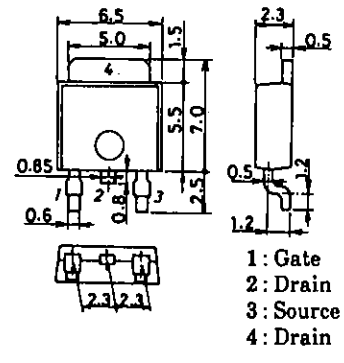
(unit : mm)



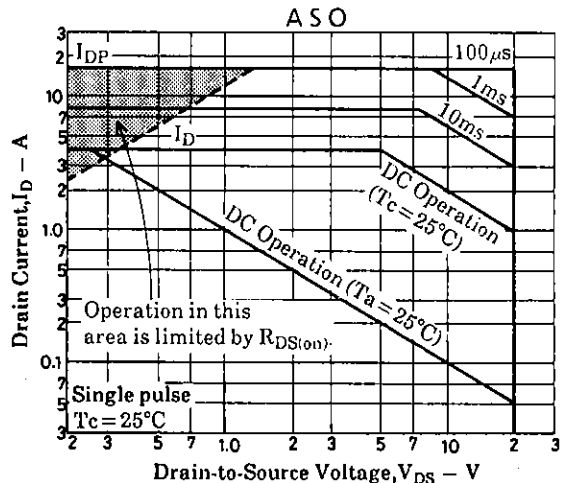
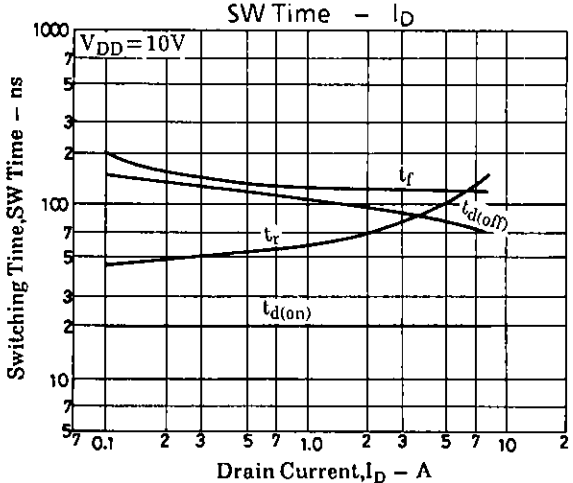
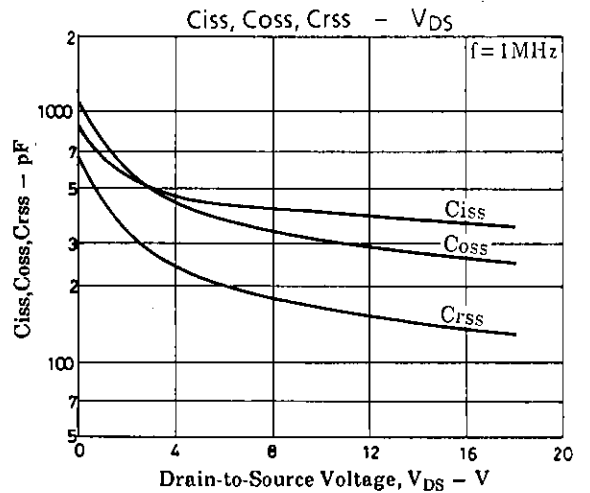
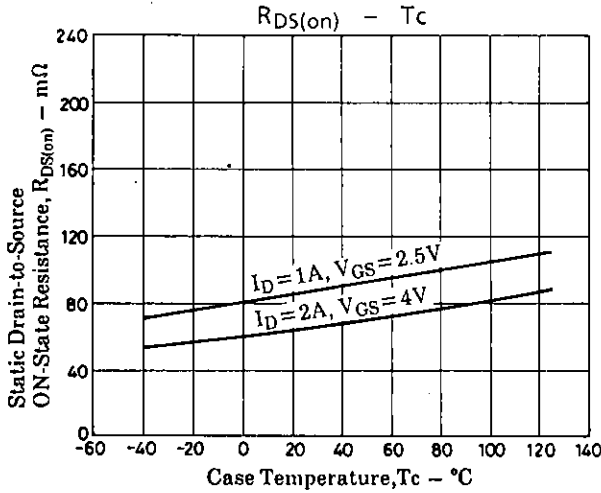
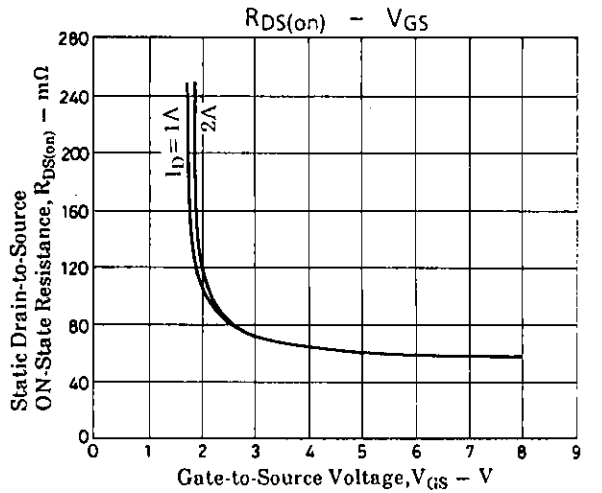
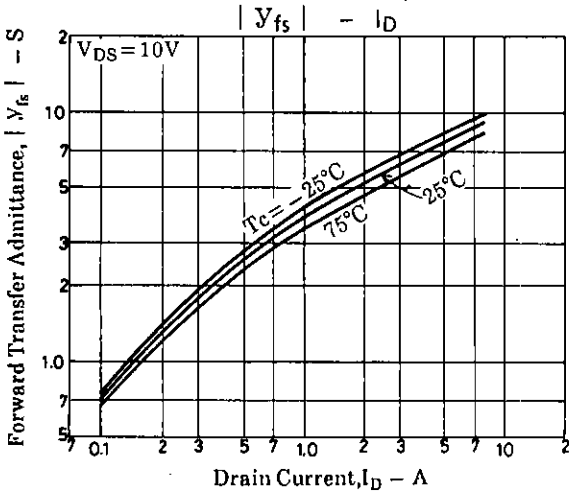
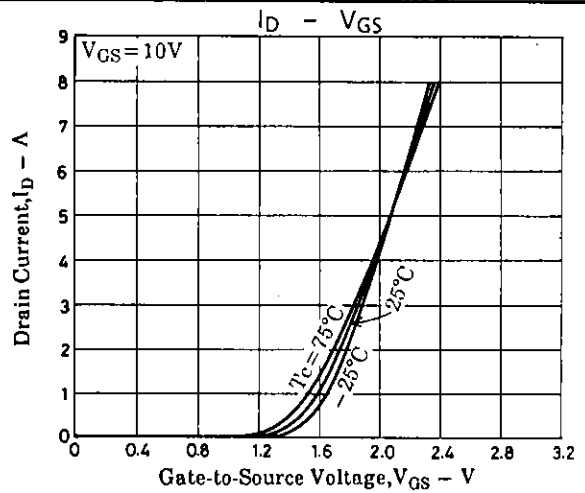
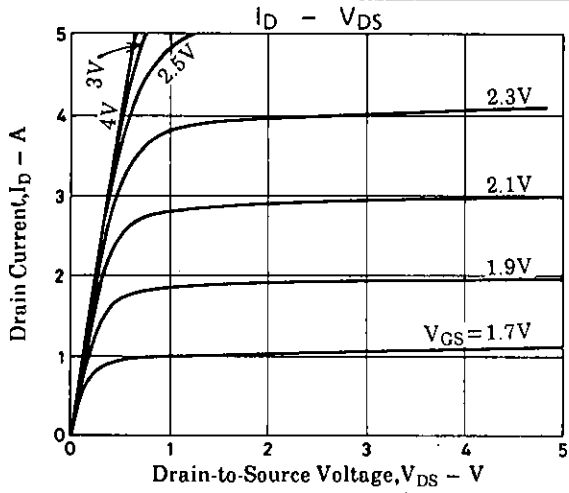
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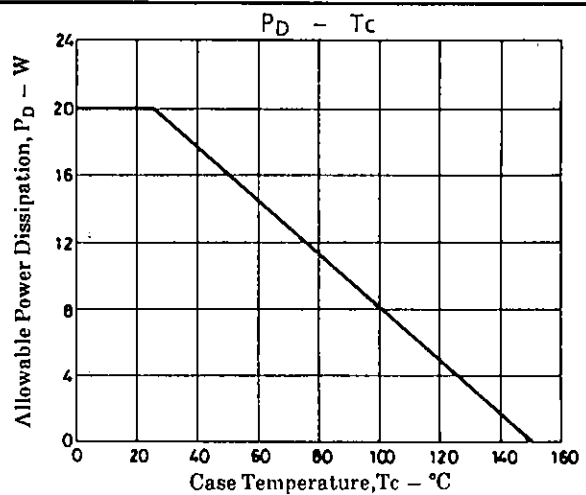
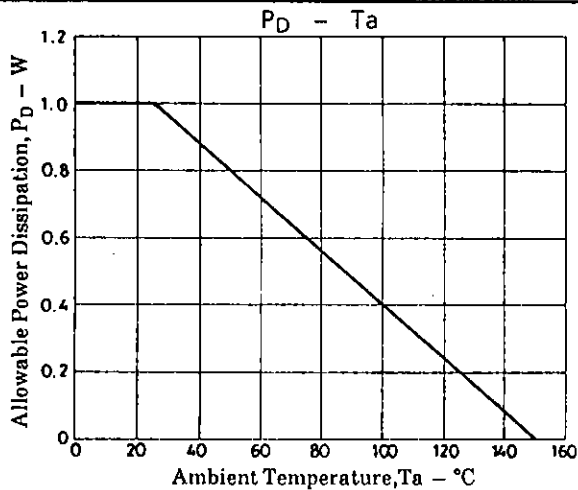
Package Dimensions 2092B

(unit : mm)



SANYO : TP-FA





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