

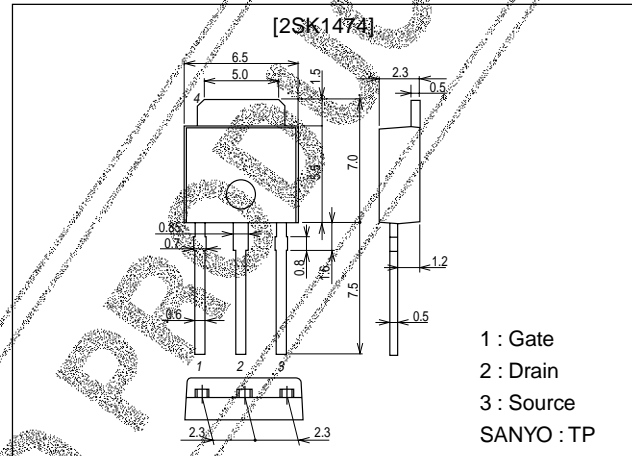
SANYO**2SK1474****Ultrahigh-Speed Switching Applications****Features**

- Low ON resistance.
- Ultrahigh-speed switching.
- Low-voltage drive.

Package Dimensions

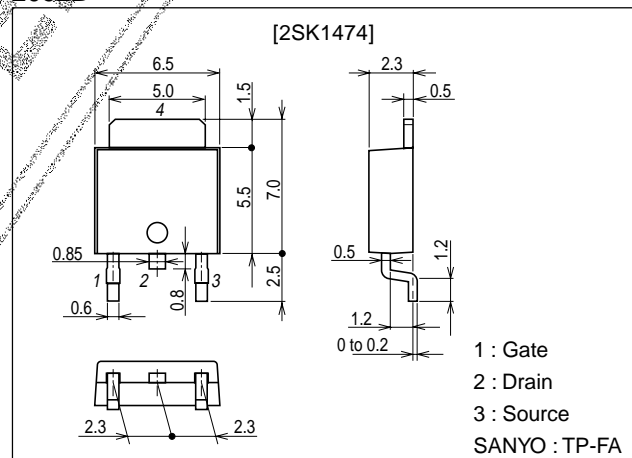
unit:mm

2083B



unit:mm

2092B



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■ SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

SANYO Electric Co.,Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Specifications

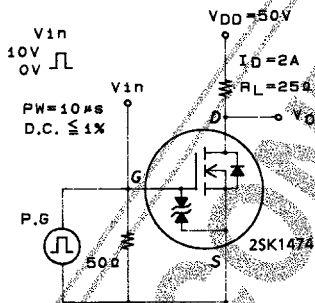
Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		100	V
Gate-to-Source Voltage	V_{GSS}		±15	V
Drain Current (DC)	I_D		4	A
Drain Current (pulse)	I_{DP}	$PW \leq 10\mu s$, duty cycle $\leq 1\%$	16	A
Allowable Power Dissipation	P_D	$T_c = 25^\circ C$	20	W
Channel Temperature	Tch		150	C
Storage Temperature	Tstg		-55 to +150	C

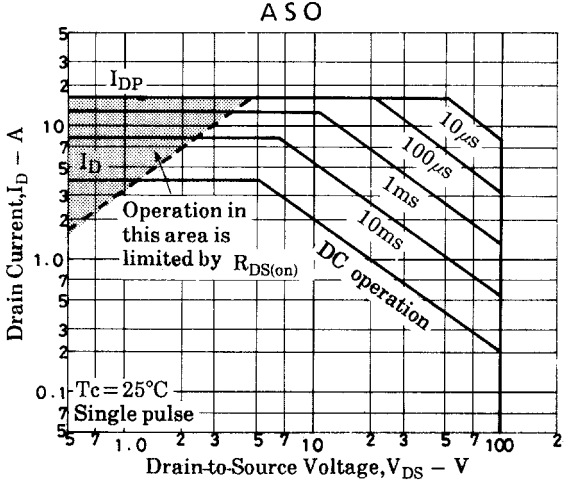
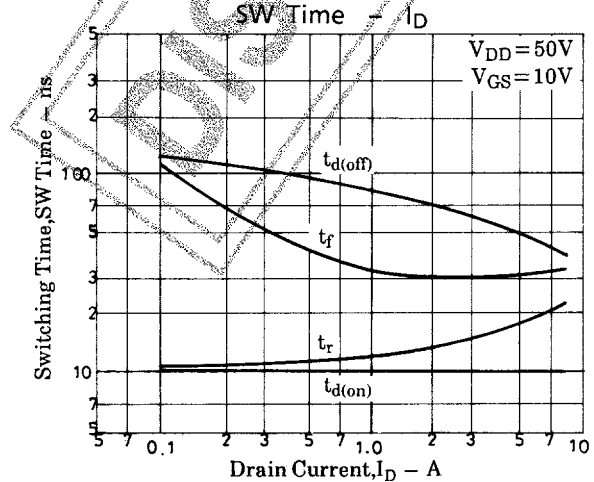
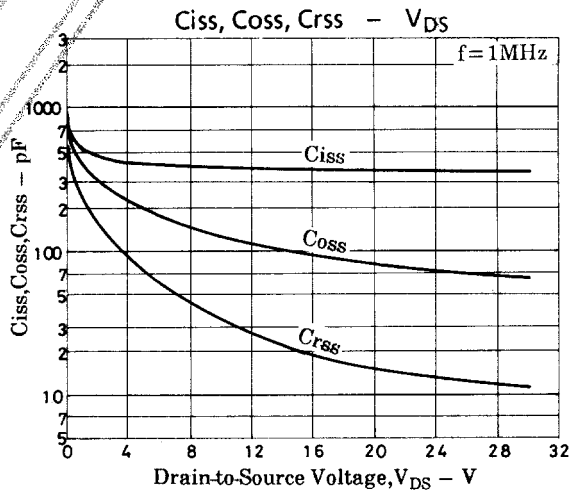
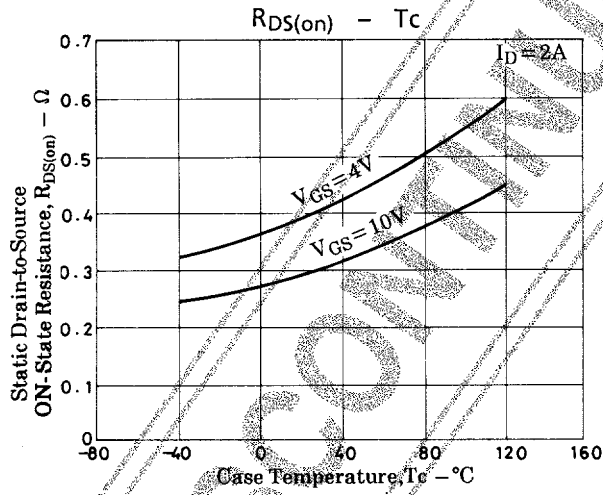
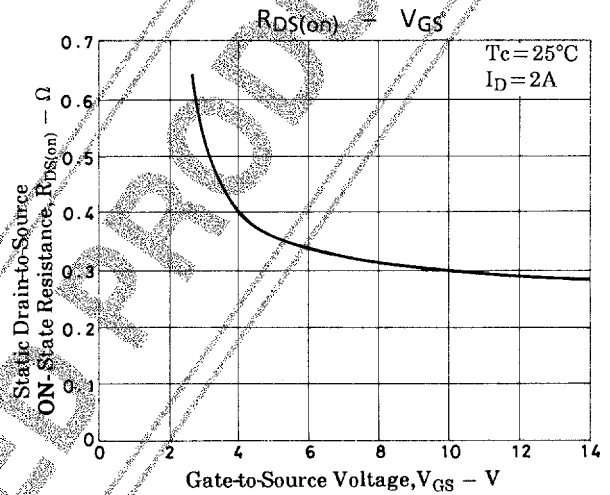
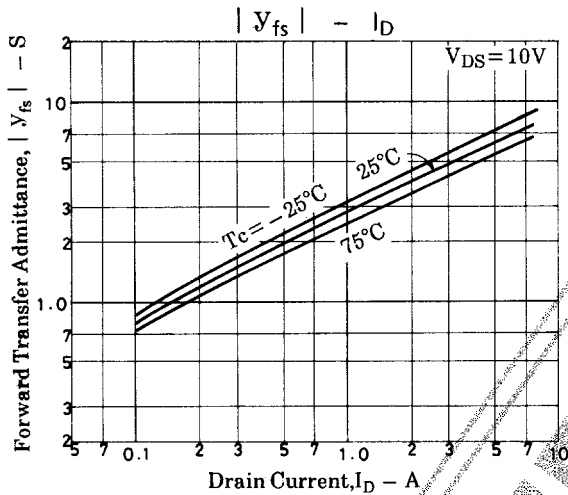
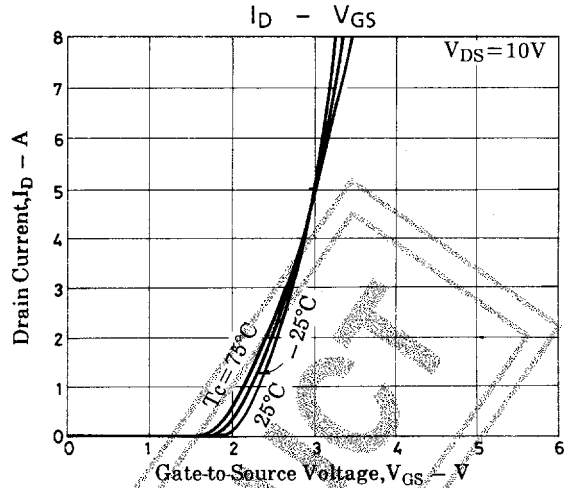
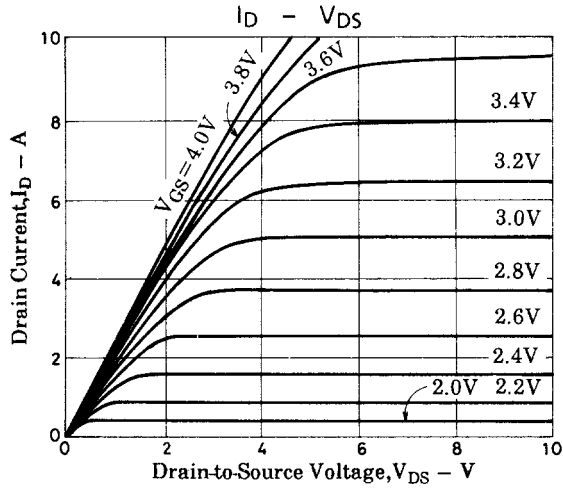
Electrical Characteristics at Ta = 25°C

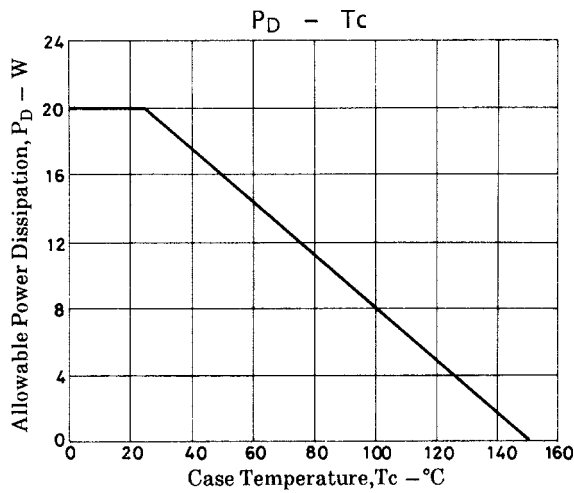
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1mA$, $V_{GS} = 0$	100			V
Gate-to-Source Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu A$, $V_{DS} = 0$	±15			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 100V$, $V_{GS} = 0$			100	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12V$, $V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V$, $I_D = 1mA$	1.0		2.0	V
Forward Transfer Admittance	yfs	$V_{DS} = 10V$, $I_D = 2A$	2.5	4		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)1}$	$I_D = 2A$, $V_{GS} = 10V$		0.3	0.4	Ω
	$R_{DS(on)2}$	$I_D = 2A$, $V_{GS} = 4V$		0.4	0.55	Ω
Input Capacitance	Ciss	$V_{DS} = 20V$, $f = 1MHz$		380		pF
Output Capacitance	Coss	$V_{DS} = 20V$, $f = 1MHz$		80		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = 20V$, $f = 1MHz$		15		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		10		ns
Rise Time	t_r	See specified Test Circuit		13		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		70		ns
Fall Time	t_f	See specified Test Circuit		30		ns
Diode Forward Voltage	V_{SD}	$I_S = 4A$, $V_{GS} = 0$		1.0	1.5	V

Switching Time Test Circuit



2SK1474





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