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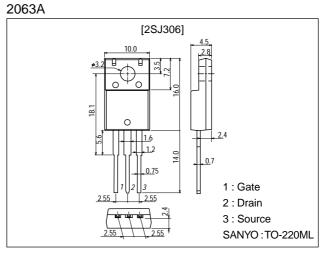
Ultrahigh-Speed Switching Applications

Features

- · Low ON resistance.
- · Ultrahigh-speed switching.
- · Low-voltage drive.
- · Micaless package facilitating mounting.

Package Dimensions

unit:mm



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	VDSS		-250	V
Gate-to-Source Voltage	VGSS		±30	V
Drain Current (DC)	۱ _D		-3	A
Drain Current (Pulse)	I _{DP}	PW≤10µs, duty cycle≤1%	-12	A
Allowable Power Dissipation	P-		2.0	W
	PD	Tc=25°C	25	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	-250			V
Gate-to-Source Breakdown Voltage	V(BR)GSS	I _G =±100µA, V _{DS} =0	±30			V
Zero-Gate Voltage Drain Current	IDSS	V _{DS} =-250V, V _{GS} =0			-100	μA
Gate-to-Source Leakage Current	IGSS	$V_{GS}=\pm 25V, V_{DS}=0$			±10	μΑ
Cutoff Voltage	VGS(off)	V_{DS} =-10V, I _D =-1mA	-1.5		-2.5	V
Forward Transfer Admittance	yfs	V _{DS} =-10V, I _D =-1.5A	1.5	2.5		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)}	I _D =-1.5A, V _{GS} =-10V		1.5	2.0	Ω

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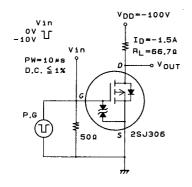
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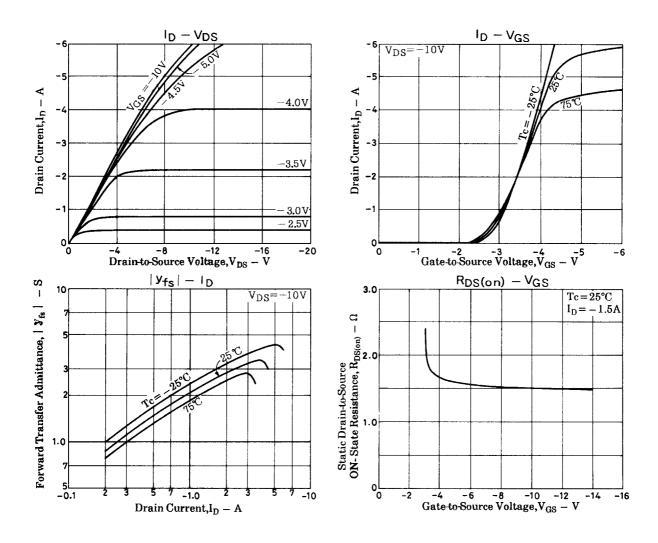
SANYO Electric Co., Ltd. Semiconductor Company TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

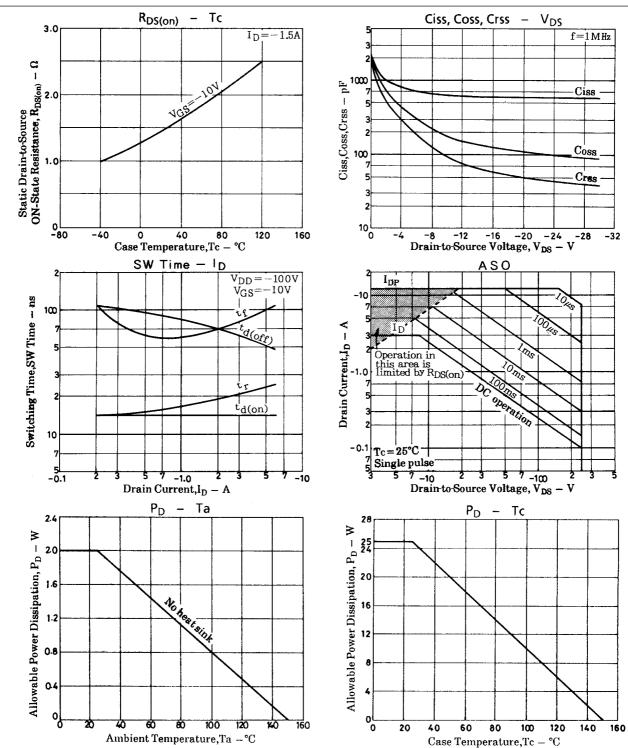
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
Input Capacitance	Ciss	V _{DS} =-20V, f=1MHz		600		pF
Output Capacitance	Coss	V _{DS} =–20V, f=1MHz		110		pF
Reverse Transfer Capacitance	Crss	V _{DS} =–20V, f=1MHz		50		pF
Turn-ON Delay Time	^t d(on)	See specified Test Circuit		14		ns
Rise Time	tr	See specified Test Circuit		18		ns
Turn-OFF Delay Time	^t d(off)	See specified Test Circuit		75		ns
Fall Time	tf	See specified Test Circuit		65		ns
Diode Forward Voltage	V _{SD}	I _S =-3A, V _{GS} =0		-1.0	-1.5	V

Switching Time Test Circuit







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