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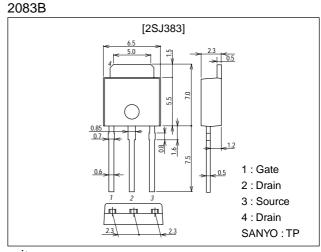
Ultrahigh-Speed Switching Applications

Features

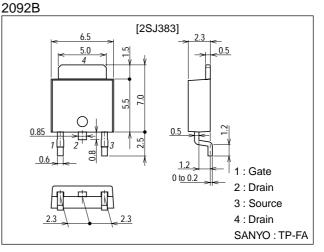
- · Low ON resistance.
- · Ultrahigh-speed switching.
- \cdot 2.5V drive.

Package Dimensions

unit:mm



unit:mm



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Specifications

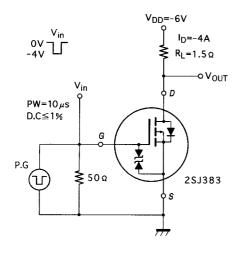
Absolute Maximum Ratings at $Ta = 25^{\circ}C$

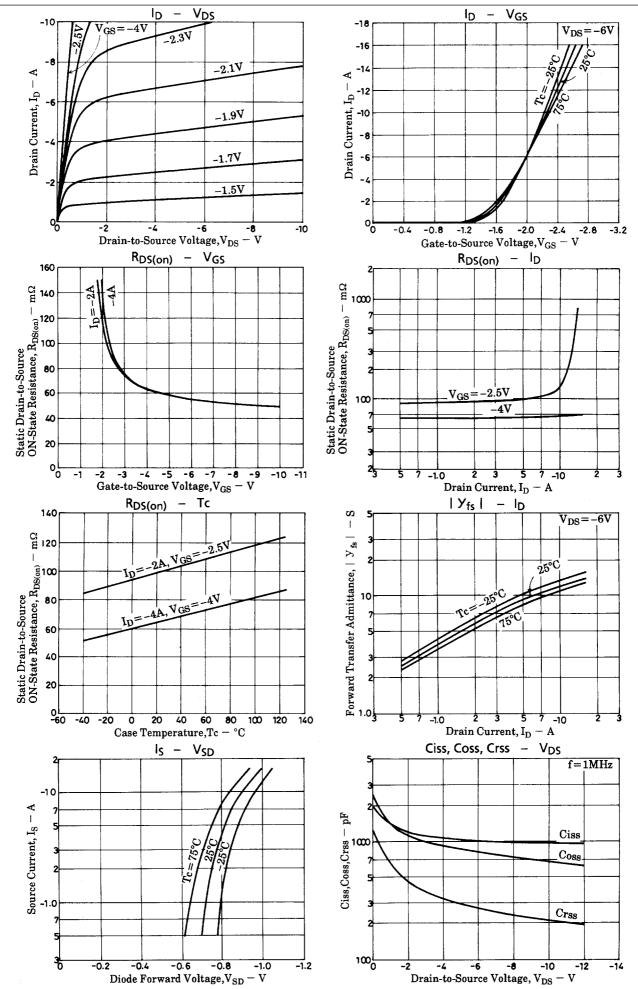
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		-12	V
Gate-to-Source Voltage	VGSS		±10	V
Drain Current (DC)	۱ _D		-8	А
Drain Current (Pulse)	I _{DP}	PW≤10µs, duty cycle≤1%	-32	А
Allowable Power Dissipation	P-		1.0	W
	PD	Tc=25°C	30	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-55 to +150	°C

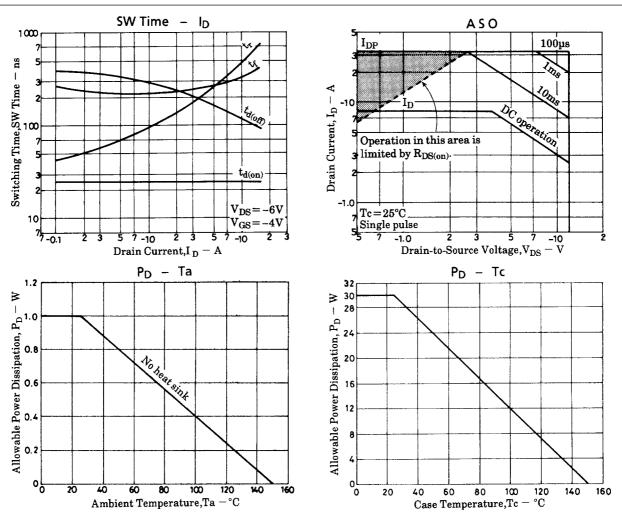
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Drain-to-Source Breakdown Voltage	V _(BR) DSS	I _D =-1mA, V _{GS} =0	-12			V
Zero-Gate Voltage Drain Current	IDSS	V _{DS} =-10V, V _{GS} =0			-100	μA
Gate-to-Source Leakage Current	IGSS	V _{GS} =±8V, V _{DS} =0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =-6V, I _D =-1mA	-0.4		-1.4	V
Forward Transfer Admittance	yfs	$V_{DS}=-6V, I_{D}=-4A$	6	8		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)}	ID=-4A, VGS=-4V		65	82	mΩ
	R _{DS(on)}	I _D =-2A, V _{GS} =-2.5V		90	144	mΩ
Input Capacitance	Ciss	V _{DS} =-6V, f=1MHz		1000		pF
Output Capacitance	Coss	V _{DS} =-6V, f=1MHz		800		pF
Reverse Transfer Capacitance	Crss	V _{DS} =-6V, f=1MHz		270		pF
Turn-ON Delay Time	td(on)	See specified Test Circuit		25		ns
Rise Time	tr	See specified Test Circuit		170		ns
Turn-OFF Delay Time	td(off)	See specified Test Circuit		180		ns
Fall Time	t _f	See specified Test Circuit		270		ns
Diode Forward Voltage	V _{SD}	I _S =-8A, V _{GS} =0		-1.0	-1.2	V

Switching Time Test Circuit







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