



2SK2623

Ultrahigh-Speed Switching Applications

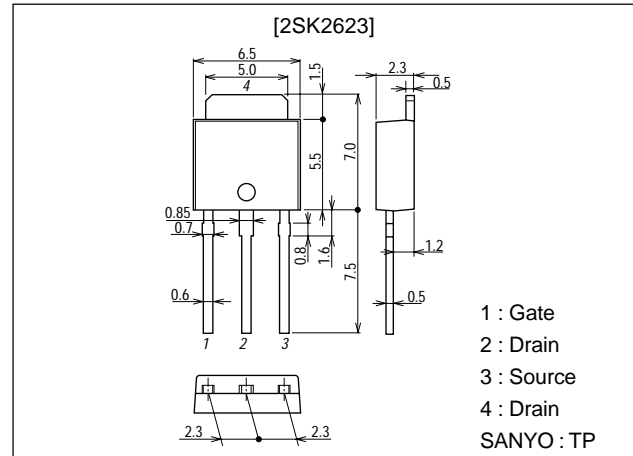
Features

- Low ON-resistance.
- Low Qg.

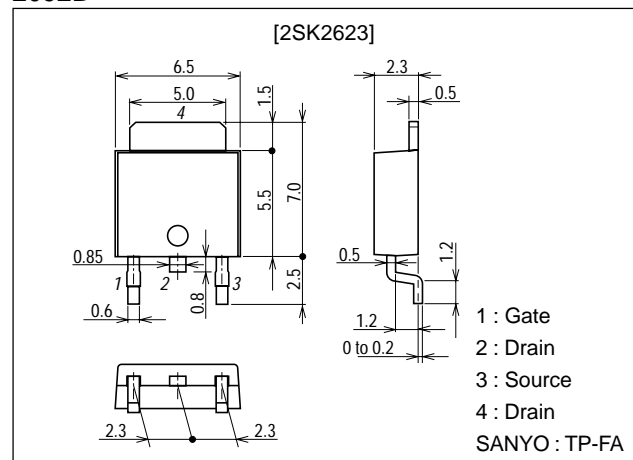
Package Dimensions

unit:mm

2083B



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.

Specifications

Absolute Maximum Ratings at Ta = 25°C

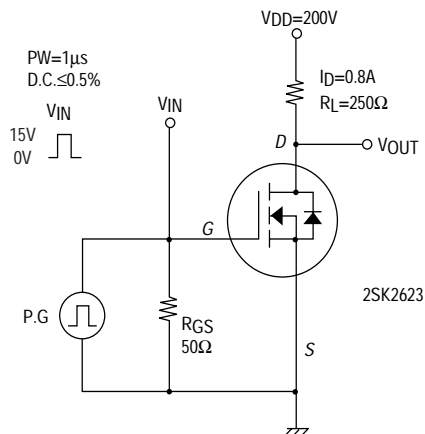
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		600	V
Gate-to-Source Voltage	V _{GSS}		±30	V
Drain Current (DC)	I _D		1.5	A
Drain Current (Pulse)	I _{DP}		6	A
Allowable Power Dissipation	P _D		1.0	W
		T _c =25°C	30	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

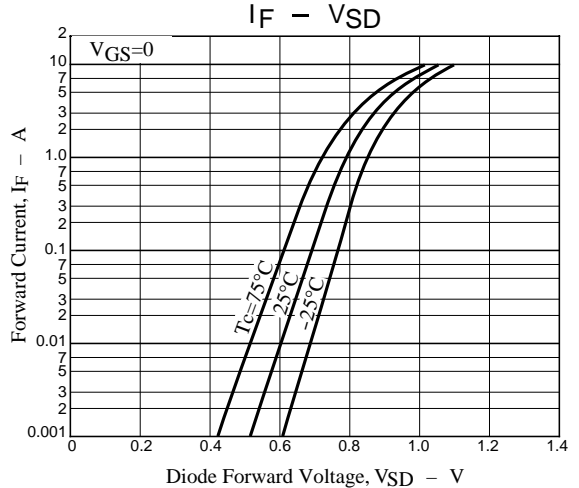
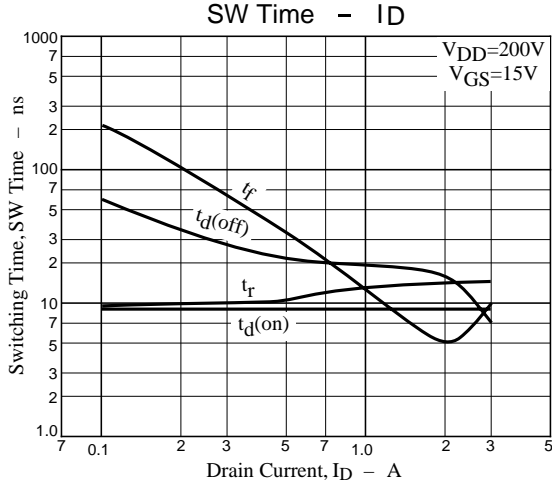
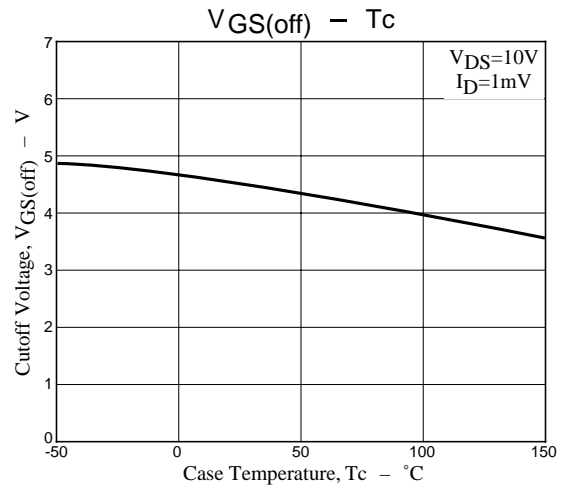
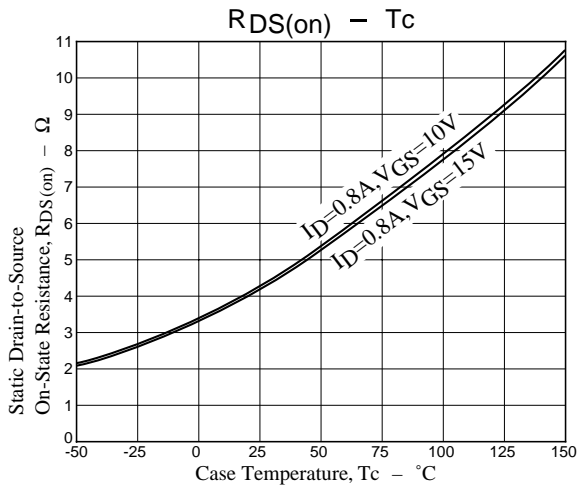
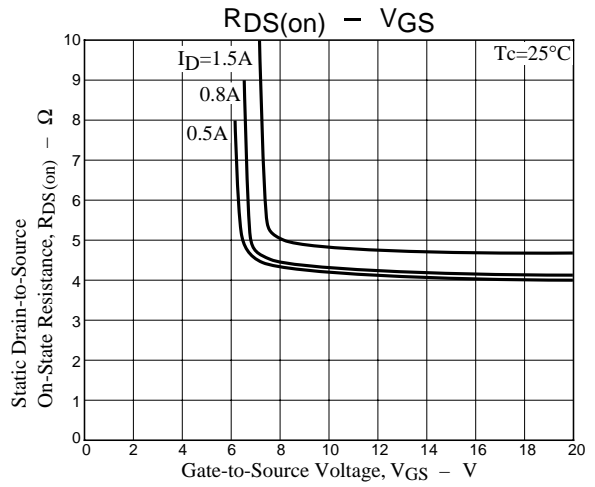
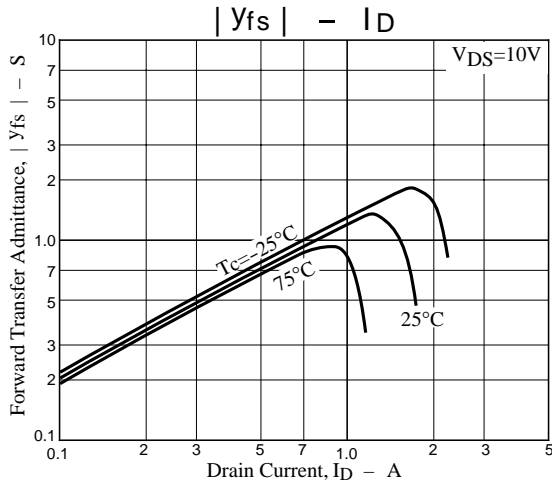
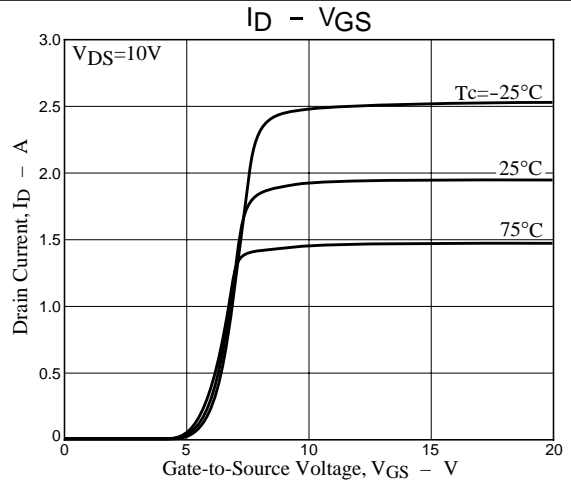
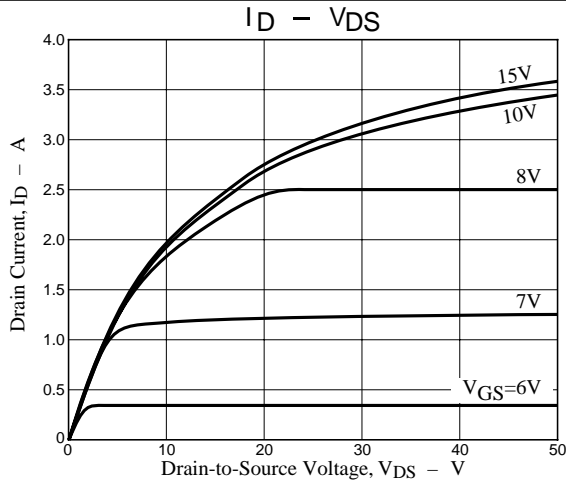
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V _{(BR)DSS}	I _D =1mA, V _{GS} =0	600			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =600V, V _{GS} =0			1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±30V, V _{DS} =0			±100	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	3.5		5.5	V
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, I _D =0.8A	0.5	1.0		S
Static Drain-to-Source On-State Resistance	R _{DS(on)}	V _{GS} =15V, I _D =0.8A		4.2	5.5	Ω
Input Capacitance	C _{iss}	V _{DS} =20V, f=1MHz		300		pF
Output Capacitance	C _{oss}	V _{DS} =20V, f=1MHz		90		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =20V, f=1MHz		45		pF
Total Gate Charge	Q _g	V _{DS} =200V, V _{GS} =10V, I _D =1.5A		8		nC
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit		9		ns
Rise Time	t _r	See specified Test Circuit		12		ns
Turn-OFF Delay Time	t _{d(off)}	See specified Test Circuit		20		ns
Fall Time	t _f	See specified Test Circuit		17		ns
Diode Forward Voltage	V _{SD}	I _S =1.5A, V _{GS} =0		0.8	1.2	V

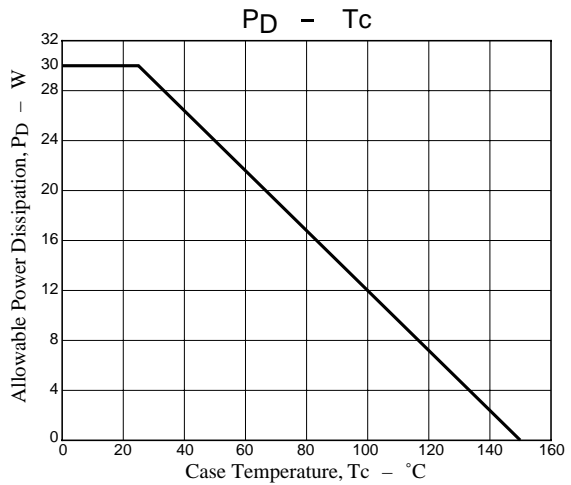
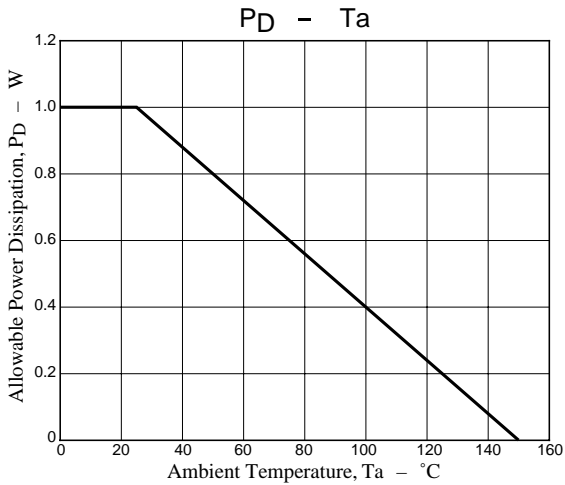
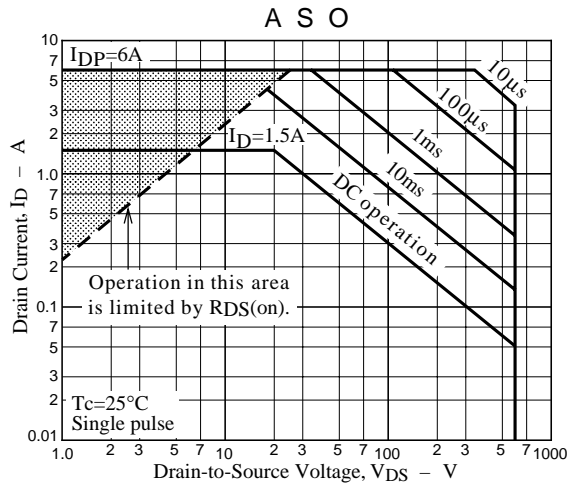
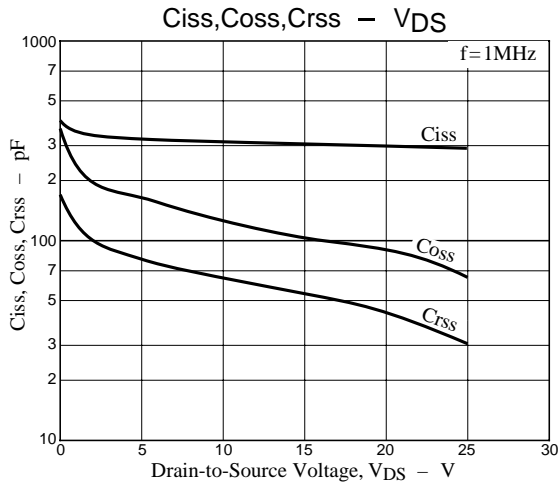
Marking : K2623

Switching Time Test Circuit



2SK2623





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