



SANYO Semiconductors

DATA SHEET

2SK2623 — N-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

- Low ON-resistance.
- Low Qg.

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}	PW≤10μs, duty cycle≤1%	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} =0V	600			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =600V, V _{GS} =0V			1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±30V, V _{DS} =0V			±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

Marking : K2623

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SANYO Semiconductor Co., Ltd.

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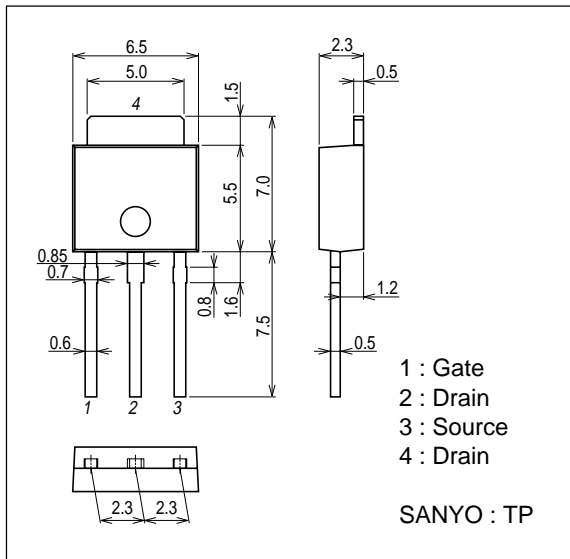
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	V _{DS} =20V, f=1MHz		300		pF
Output Capacitance	Coss	V _{DS} =20V, f=1MHz		90		pF
Reverse Transfer Capacitance	Crss	V _{DS} =20V, f=1MHz		45		pF
Total Gate Charge	Qg	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} =0V		0.8	1.2	V

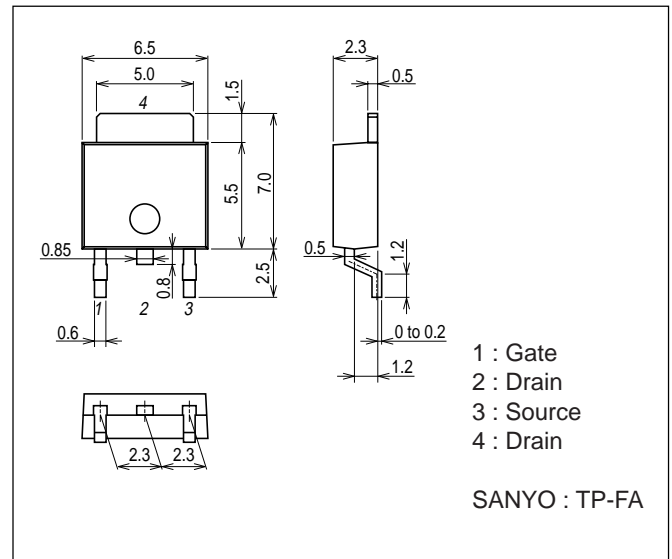
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unit : mm (typ)
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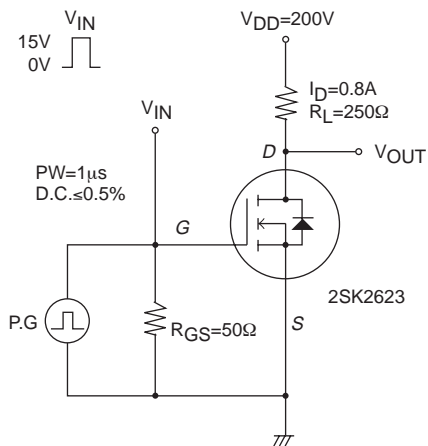


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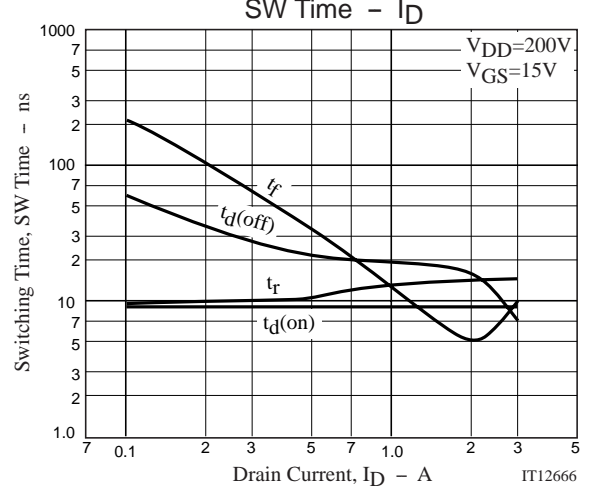
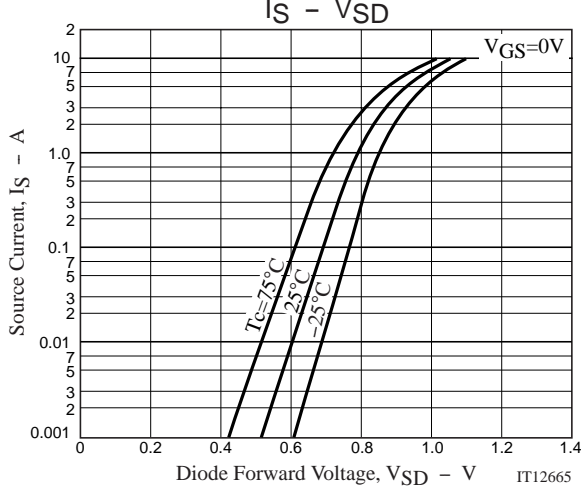
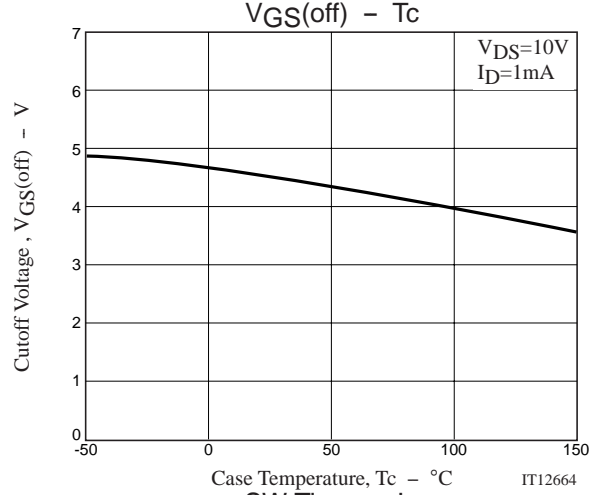
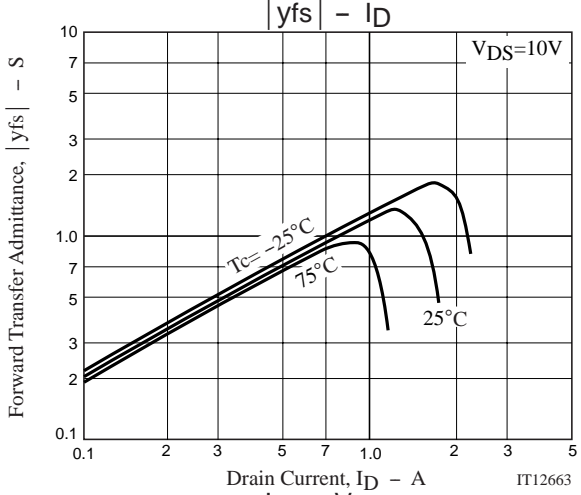
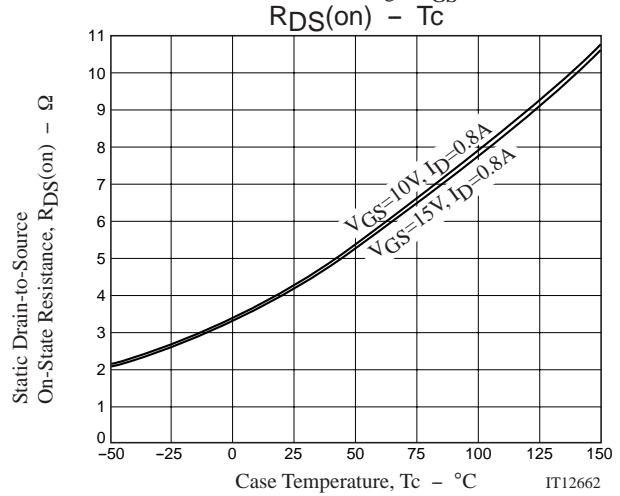
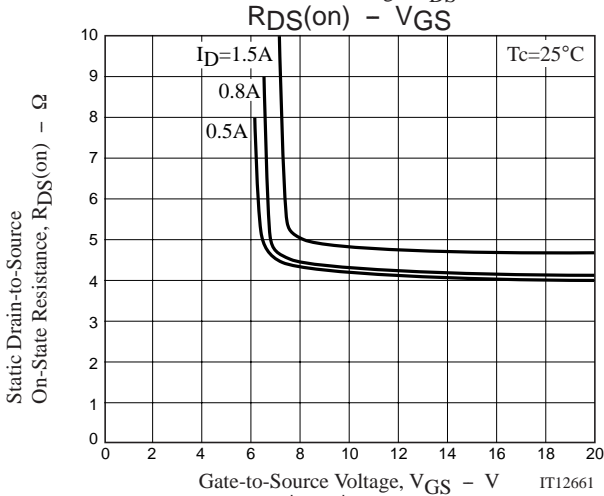
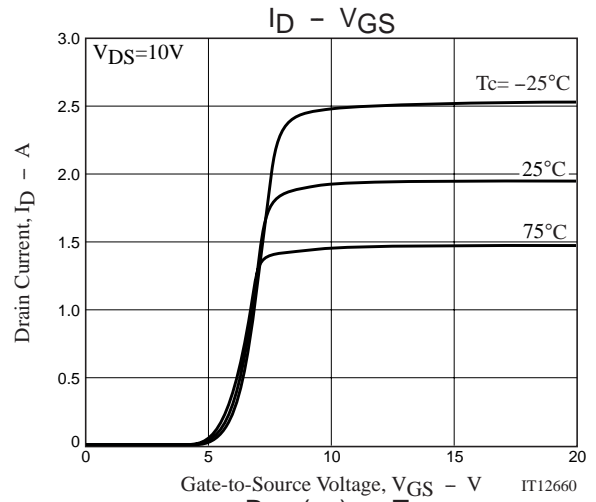
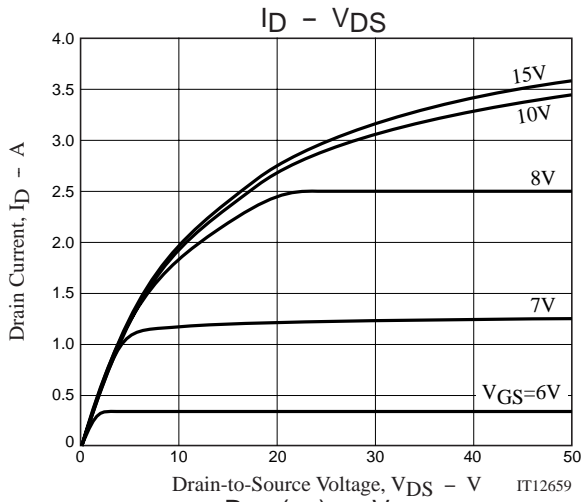
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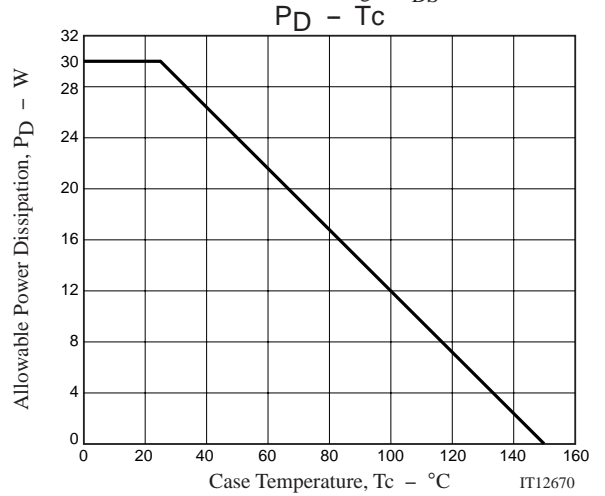
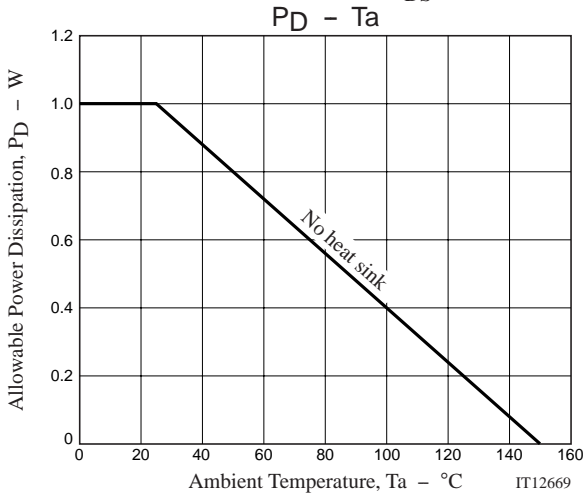
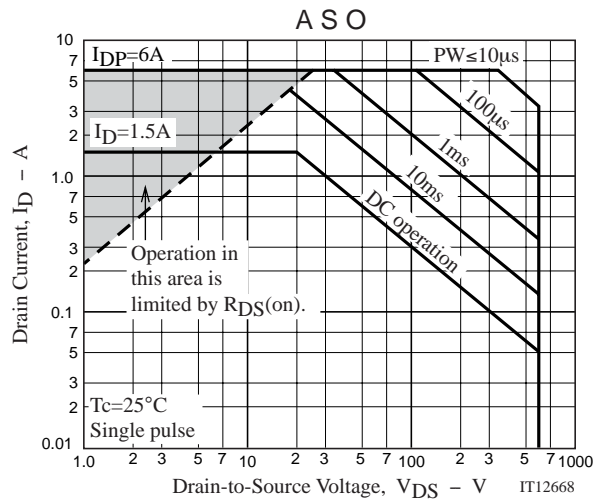
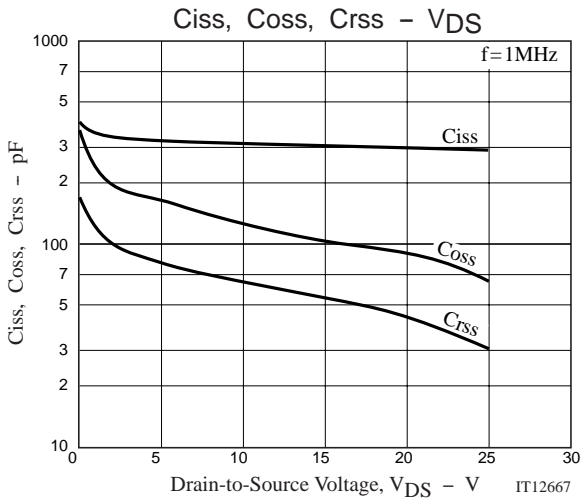


Switching Time Test Circuit



2SK2623





Note on usage : Since the 2SK2623 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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