



2SK3491

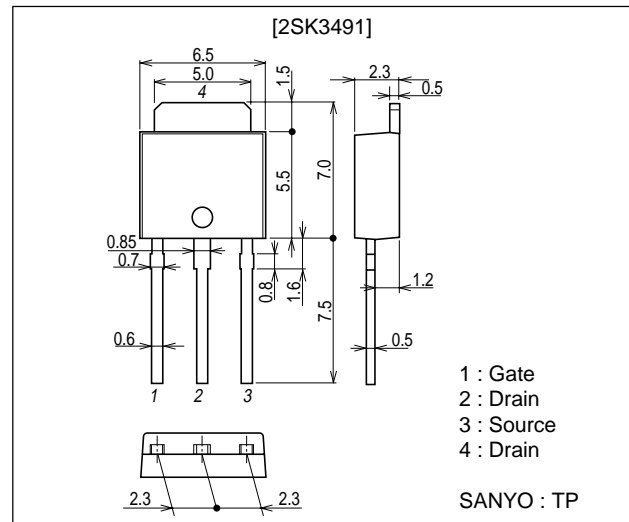
Ultrahigh-Speed Switching Applications

Features

- Low ON-resistance.
- Low Qg.

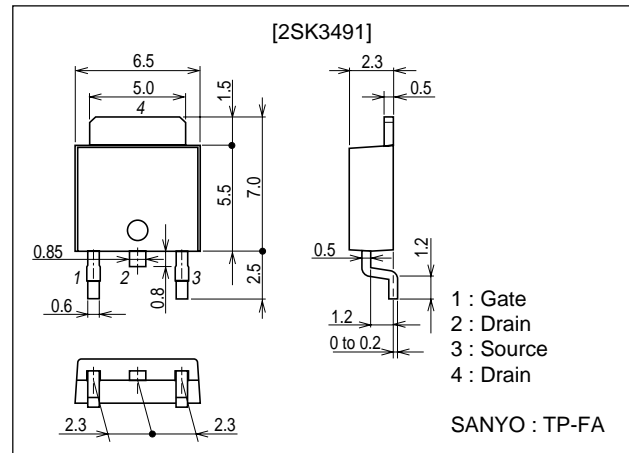
Package Dimensions

unit : mm
2083B



Package Dimensions

unit : mm
2092B



- Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.
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Specifications

Absolute Maximum Ratings at Ta=25°C

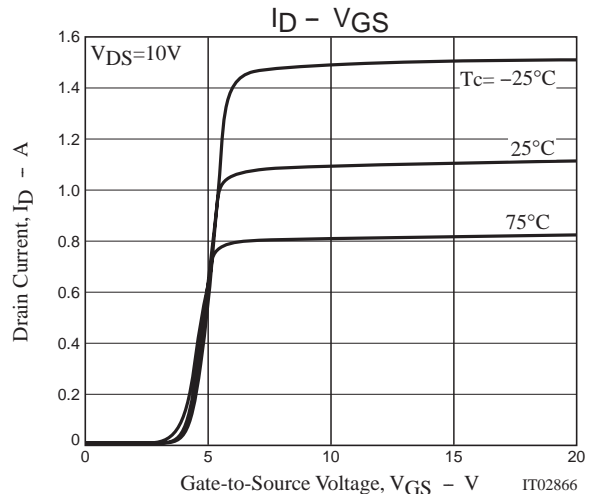
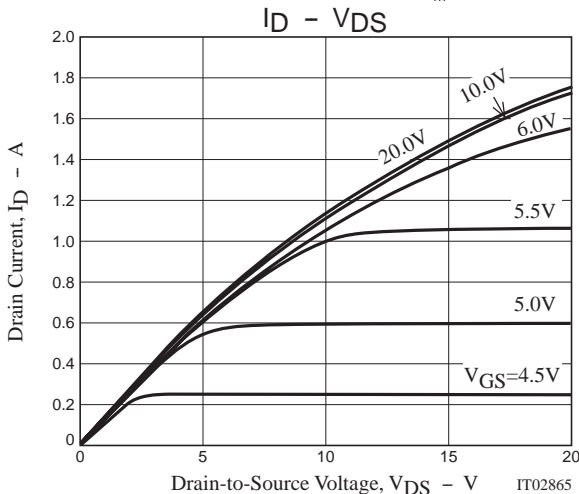
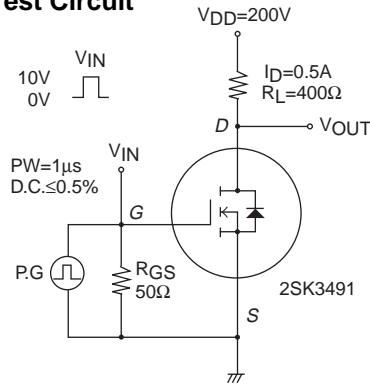
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		600	V
Gate-to-Source Voltage	V _{GSS}		±30	V
Drain Current (DC)	I _D		1.0	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	4.0	A
Allowable Power Dissipation	P _D		1.0	W
		T _c =25°C	20	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

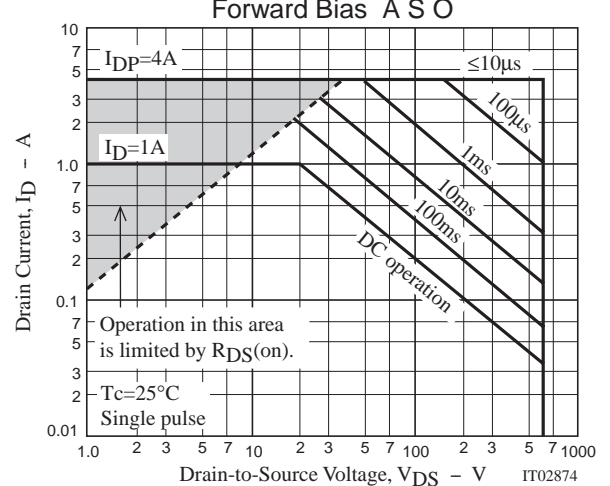
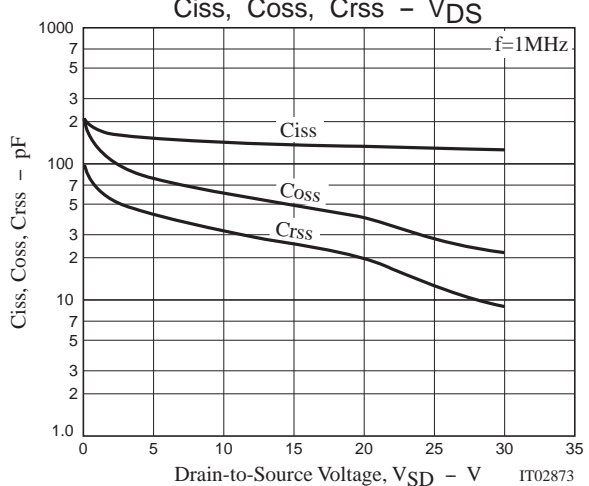
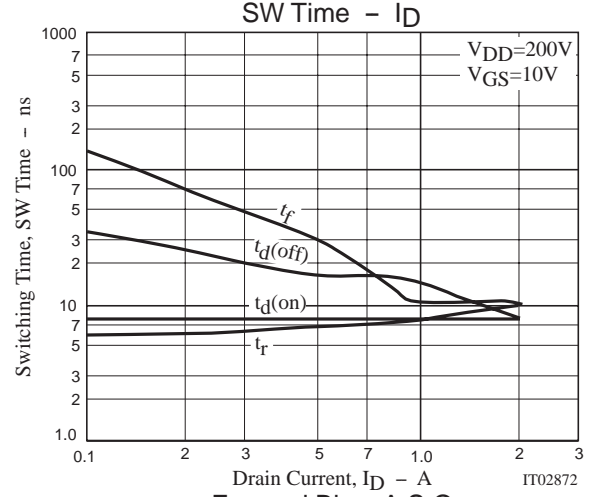
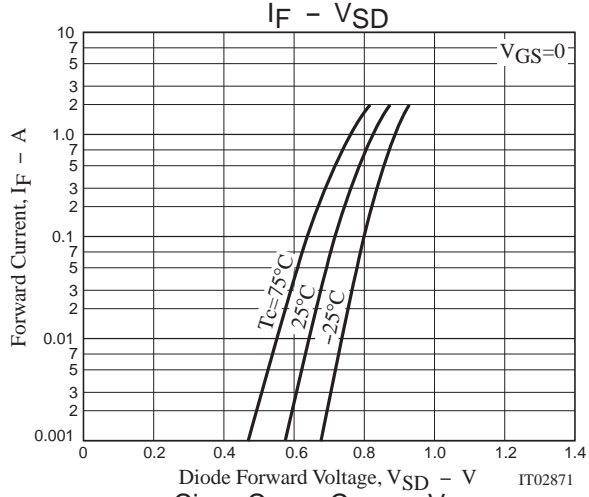
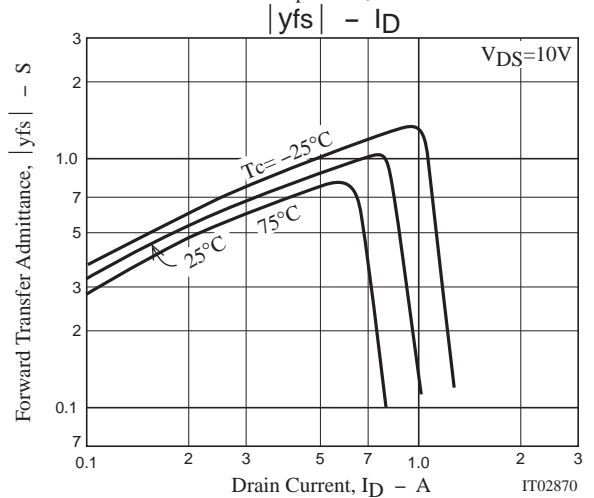
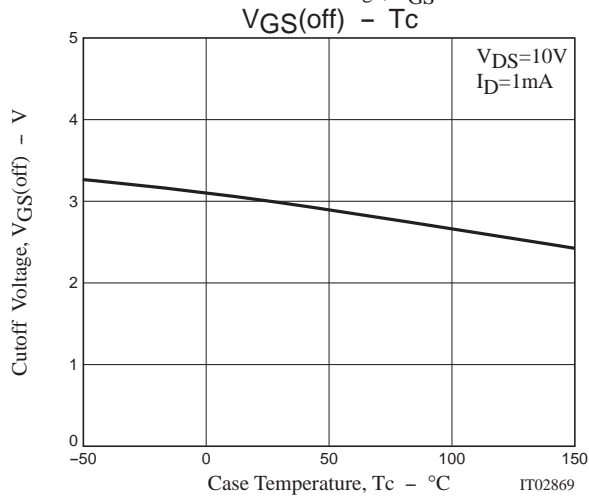
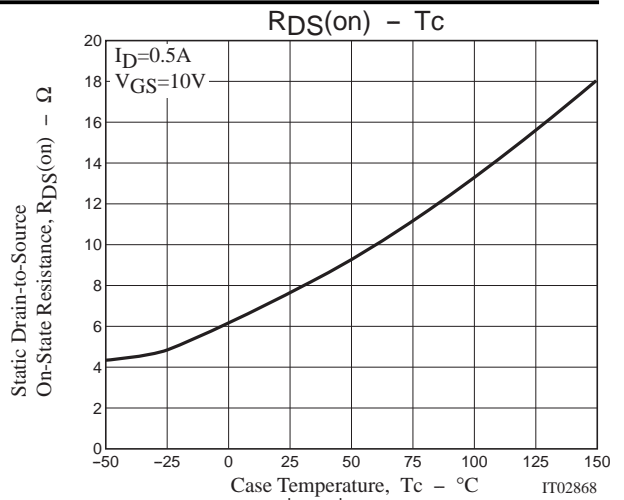
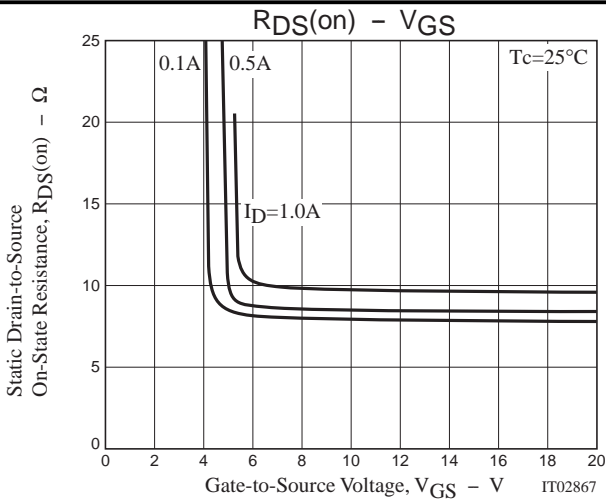
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V _{(BR)DSS}	I _D =1mA, V _{GS} =0	600			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =600V, V _{GS} =0			100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±30V, V _{DS} =0			±100	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	2.5		3.5	V
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, I _D =0.5A	430	850		mS
Static Drain-to-Source On-State Resistance	R _{DS(on)}	V _{DS} =10V, I _D =0.5A		8.5	11	Ω
Input Capacitance	C _{iss}	V _{DS} =20V, f=1MHz		135		pF
Output Capacitance	C _{oss}	V _{DS} =20V, f=1MHz		40		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =20V, f=1MHz		20		pF
Total Gate Charge	Q _g	V _{DS} =200V, V _{GS} =10V, I _D =1.0A		6		nC
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit		8		ns
Rise Time	t _r	See specified Test Circuit		7		ns
Turn-OFF Delay Time	t _{d(off)}	See specified Test Circuit		17		ns
Fall Time	t _f	See specified Test Circuit		30		ns
Diode Forward Voltage	V _{SD}	I _S =1.0A, V _{GS} =0		0.83	1.2	V

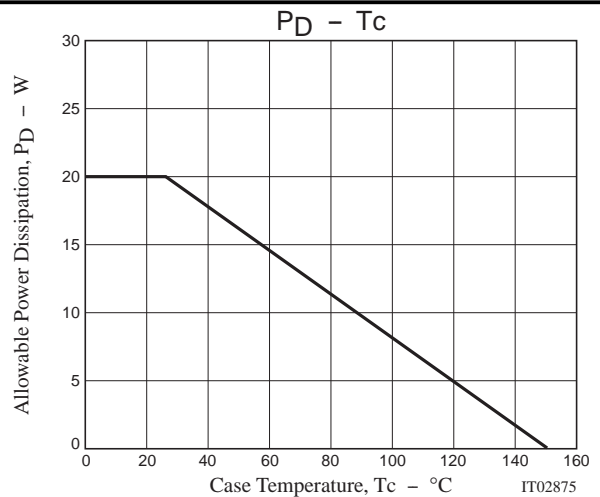
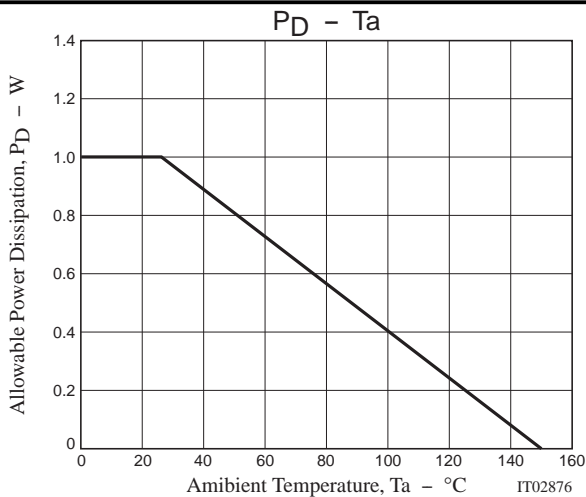
Marking : K3491

Switching Time Test Circuit



2SK3491





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