

2SK1469

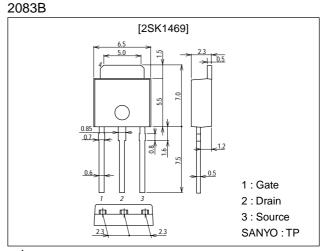
Ultrahigh-Speed Switching Applications

Features

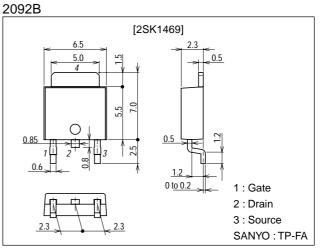
- \cdot Low ON resistance.
- · Ultrahigh-speed switching.
- · Low-voltage drive.

Package Dimensions

unit:mm



unit:mm



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Specifications

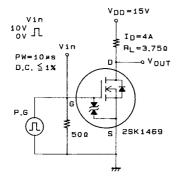
Absolute Maximum Ratings at Ta = 25°C

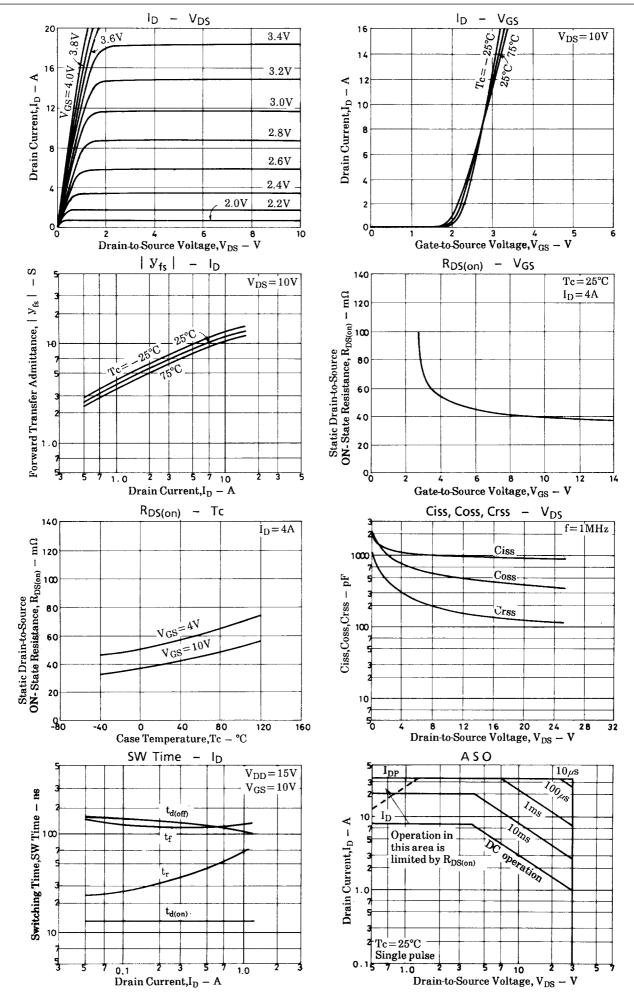
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		30	V
Gate-to-Source Voltage	V _{GSS}		±15	V
Drain Current (DC)	۱ _D		8	A
Drain Current (pulse)	IDP	PW≤10µs, duty cycle≤1%	32	A
Allowable Power Dissipation	PD		1.0	W
	F D	Tc=25°C	30	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-55 to +150	°C

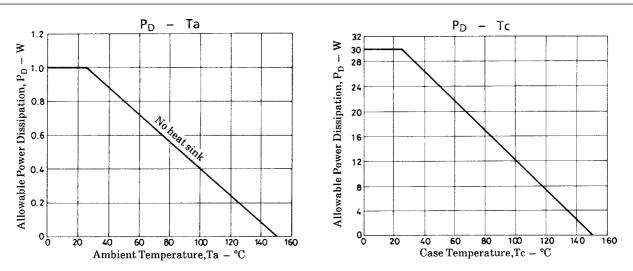
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
			min	typ	max	Unit
Drain-to-Source Breakdown Voltage	V(BR)DSS	I _D =1mA, V _{GS} =0	30			V
Gate-to-Source Breakdown Voltage	V(BR)GSS	IG=±100µA, V _{DS} =0	±15			V
Zero-Gate Votlage Drain Current	IDSS	V _{DS} =30V, V _{GS} =0			100	μΑ
Gate-to-Source Leakage Current	IGSS	V _{GS} =±12V, V _{DS} =0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	1.0		2.0	V
Forward Transfer Admittance	yfs	V _{DS} =10V, I _D =4A	5	8		S
Static Drain-to-Source On-State Resistance	R _{DS(on)} 1	I _D =4A, V _{GS} =10V		40	55	mΩ
	R _{DS(on)} 2	ID=4A, VGS=4V		55	75	mΩ
Input Capacitance	Ciss	V _{DS} =10V, f=1MHz		1000		pF
Output Capacitance	Coss	V _{DS} =10V, f=1MHz		550		pF
Reverse Transfer Capacitance	Crss	V _{DS} =10V, f=1MHz		180		pF
Turn-ON Delay Time	^t d(on)	See specified Test Circuit		13		ns
Rise Time	tr	See specified Test Circuit		40		ns
Turn-OFF Delay Time	^t d(off)	See specified Test Circuit		130		ns
Fall Time	t _f	See specified Test Circuit		120		ns
Diode Forward Voltage	V _{SD}	I _S =8A, V _{GS} =0		1.0	1.5	V

Switching Time Test Circuit







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