



2SK2632LS

Ultrahigh-Speed Switching Applications

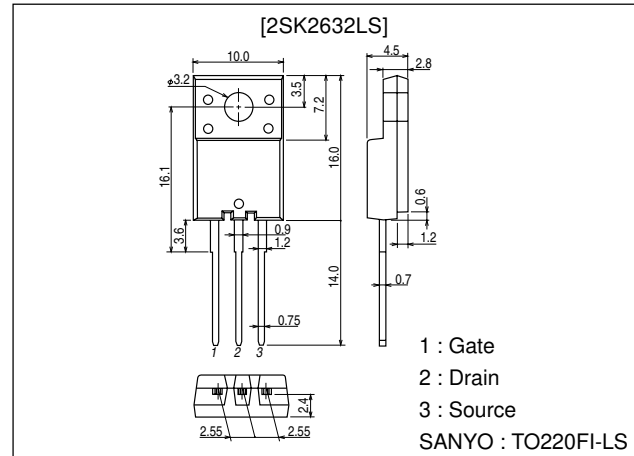
Features

- Low ON-resistance.
- Low Qg.

Package Dimensions

unit:mm

2078B



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		800	V
Gate-to-Source Voltage	V_{GSS}		± 30	V
Drain Current (DC)	I_D		2.5	A
Drain Current (Pulse)	I_{DP}		7.5	A
Allowable Power Dissipation	P_D	$PW \leq 10 \mu s$, duty cycle $\leq 1\%$	2.0	W
		$T_c = 25^\circ C$	25	W
Channel Temperature	T_{ch}		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1 \text{ mA}$, $V_{GS} = 0$	800			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 800 \text{ V}$, $V_{GS} = 0$			1.0	mA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 30 \text{ V}$, $V_{DS} = 0$			± 100	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10 \text{ V}$, $I_D = 1 \text{ mA}$	3.5		5.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 10 \text{ V}$, $I_D = 1.3 \text{ A}$	0.7	1.4		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$V_{GS} = 15 \text{ V}$, $I_D = 1.3 \text{ A}$		3.6	4.8	Ω
Input Capacitance	C_{iss}	$V_{DS} = 20 \text{ V}$, $f = 1 \text{ MHz}$		550		pF
Output Capacitance	C_{oss}	$V_{DS} = 20 \text{ V}$, $f = 1 \text{ MHz}$		150		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 20 \text{ V}$, $f = 1 \text{ MHz}$		70		pF

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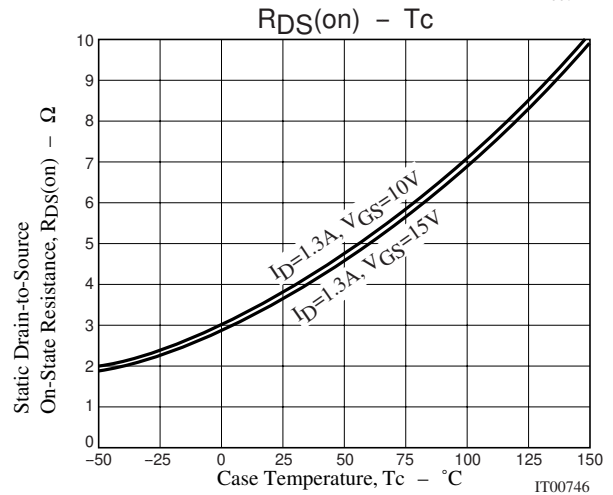
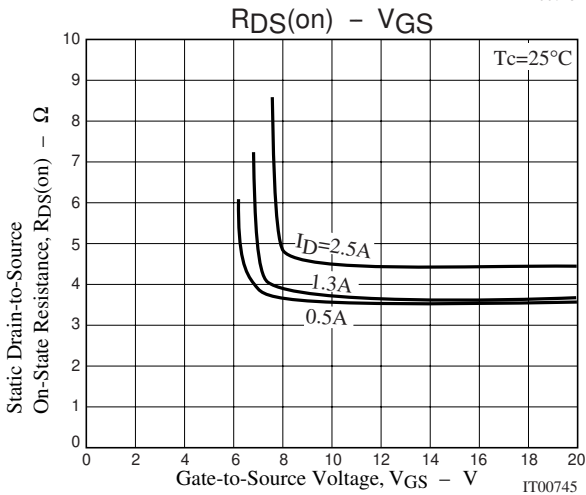
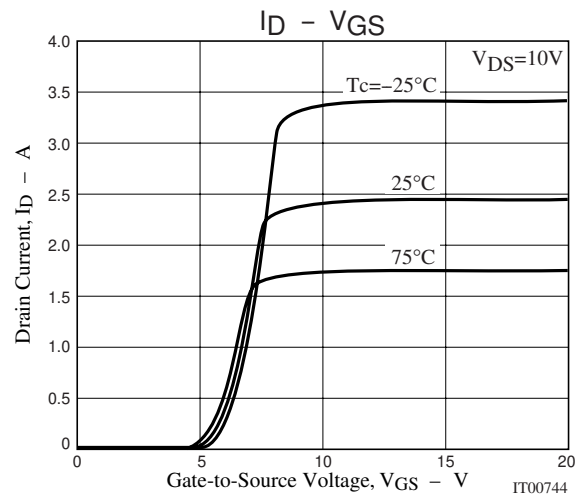
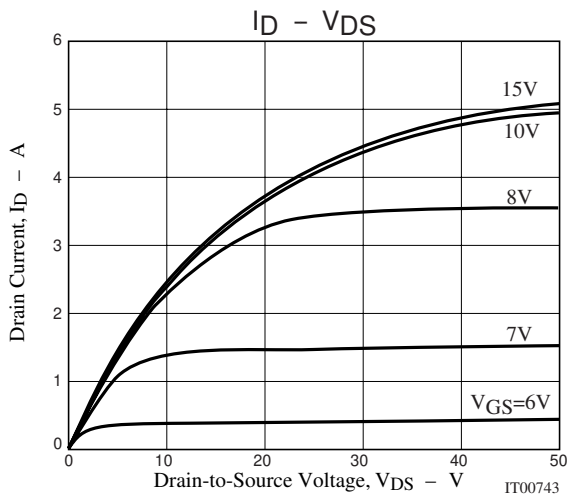
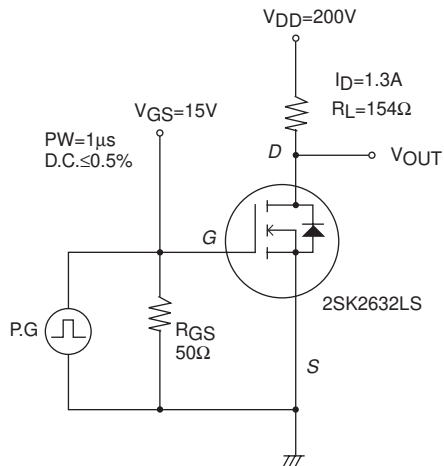
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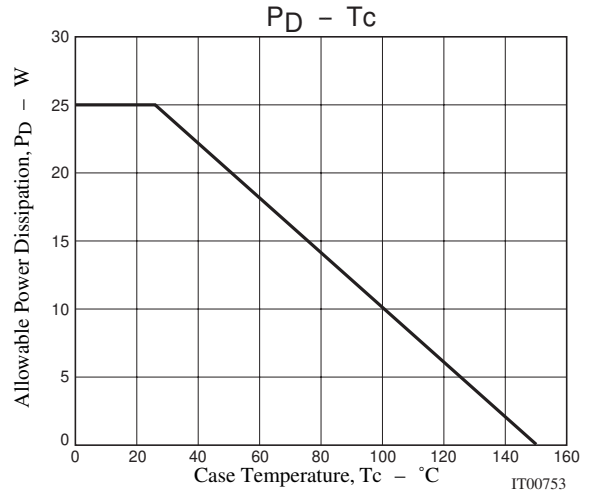
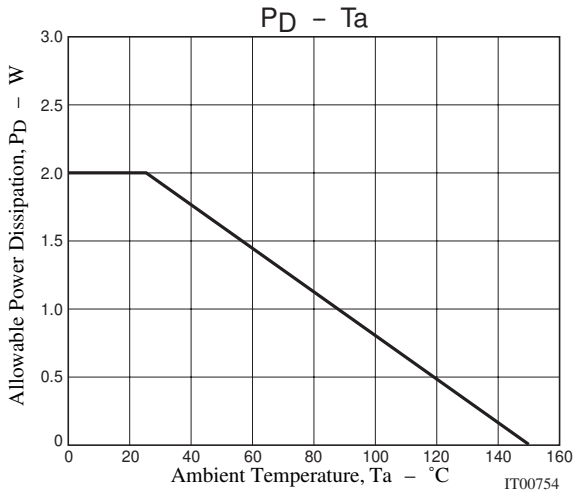
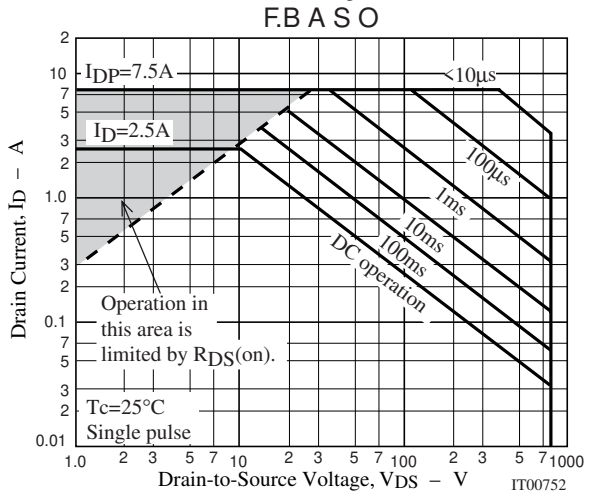
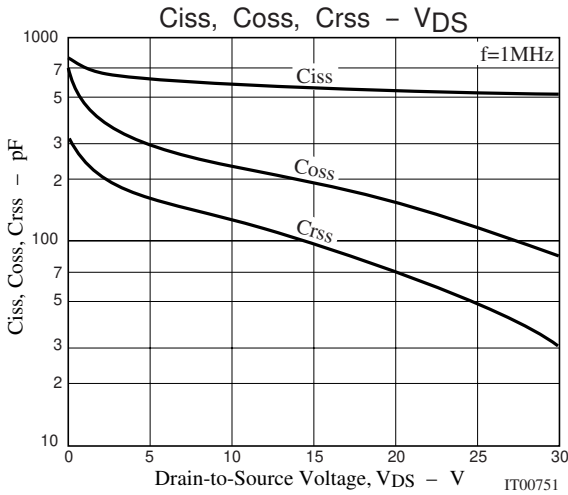
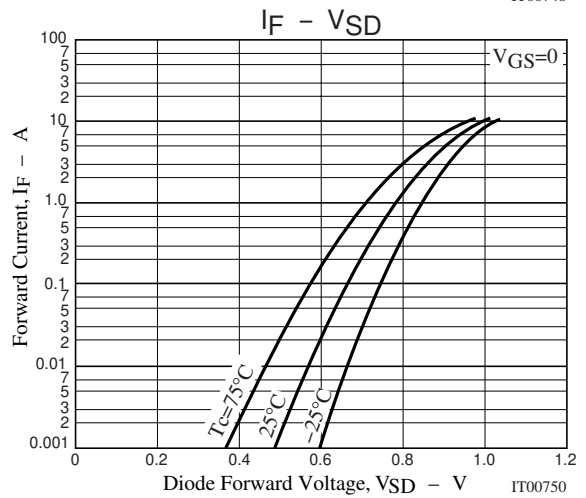
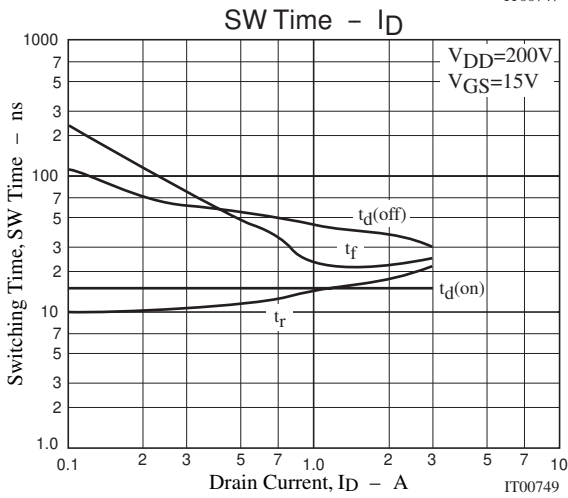
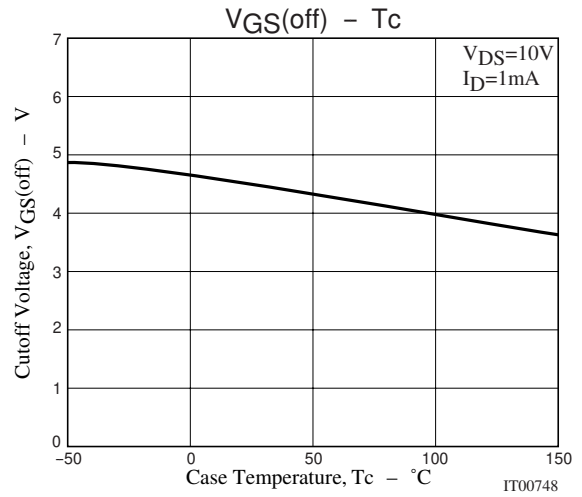
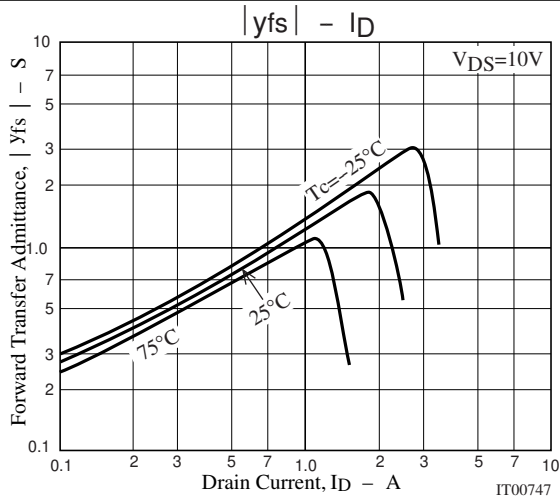
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Total Gate Charge	Qg	V _{DS} =200V, V _{GS} =10V, I _D =2.5A		15		nC
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit		15		ns
Rise Time	t _r	See specified Test Circuit		15		ns
Turn-OFF Delay Time	t _{d(off)}	See specified Test Circuit		45		ns
Fall Time	t _f	See specified Test Circuit		23		ns
Diode Forward Voltage	V _{SD}	I _S =2.5A, V _{GS} =0	0.84	1.2		V

Marking : K2632

Switching Time Test Circuit



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