

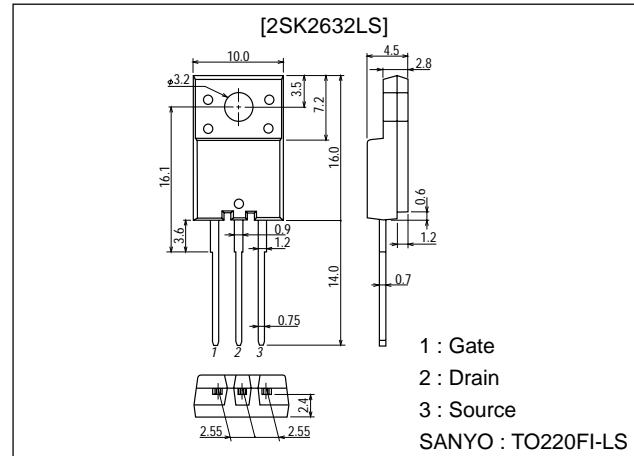
**2SK2632LS****Ultrahigh-Speed Switching Applications****Features**

- Low ON-resistance.
- Low Qg.

**Package Dimensions**

unit:mm

2078B

**Specifications****Absolute Maximum Ratings** at  $T_a = 25^\circ\text{C}$ 

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

**Electrical Characteristics** at  $T_a = 25^\circ\text{C}$ 

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	$I_{GSS}$	$V_{GS} = \pm 30\text{V}$ , $V_{DS} = 0$			$\pm 100$	nA
Cutoff Voltage	$V_{GSS(off)}$	$V_{DS} = 10\text{V}$ , $I_D = 1\text{mA}$	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	$\Omega$
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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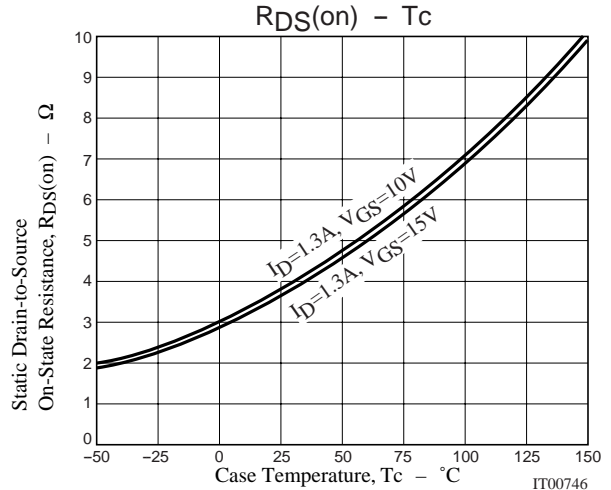
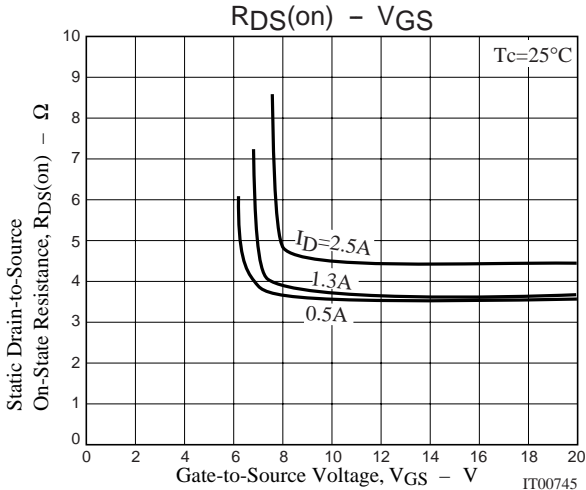
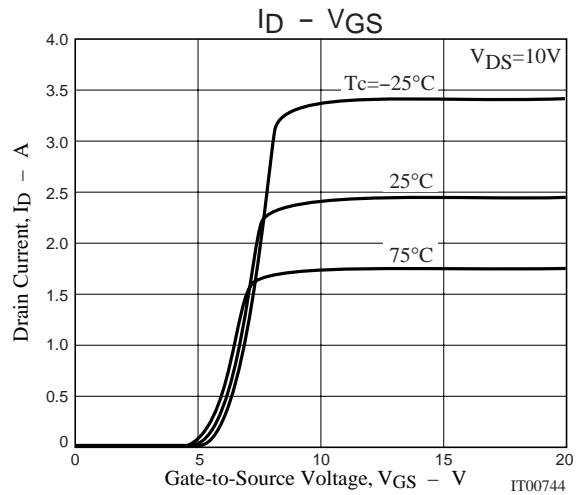
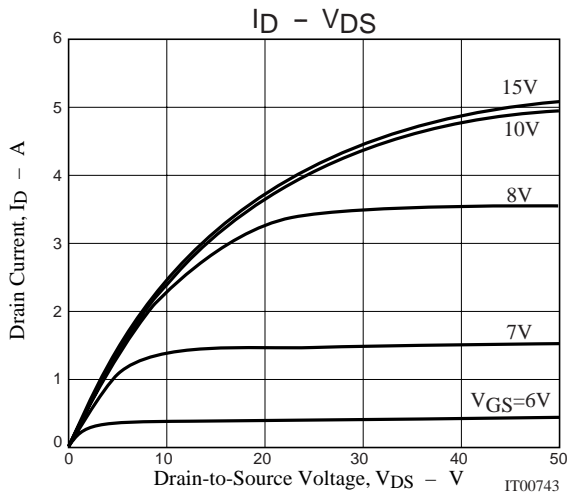
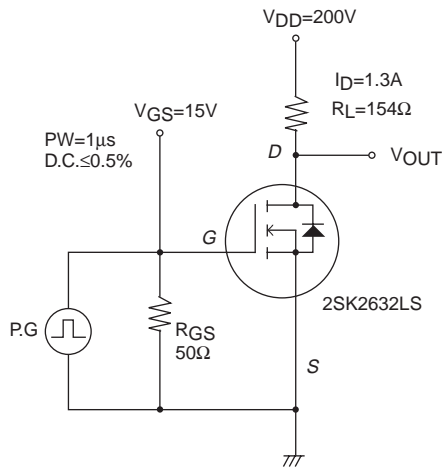
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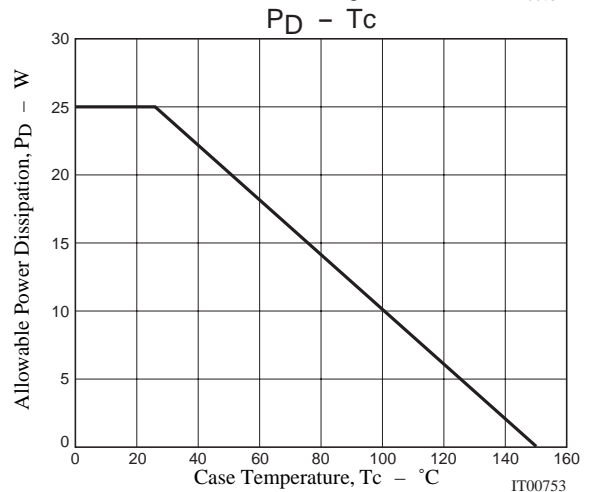
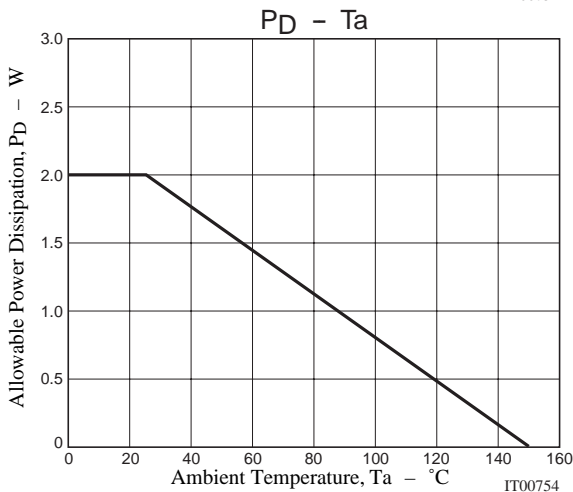
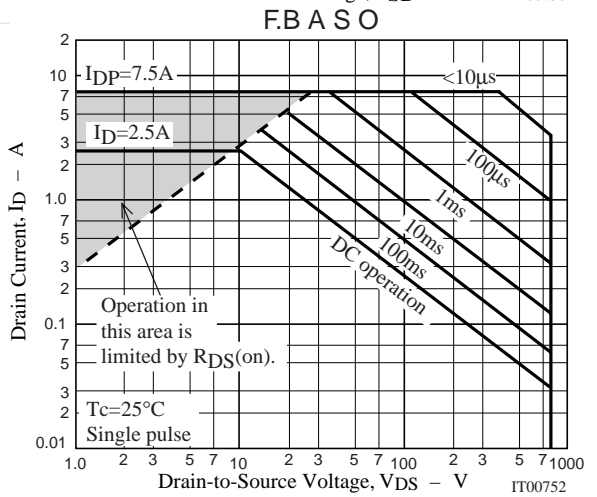
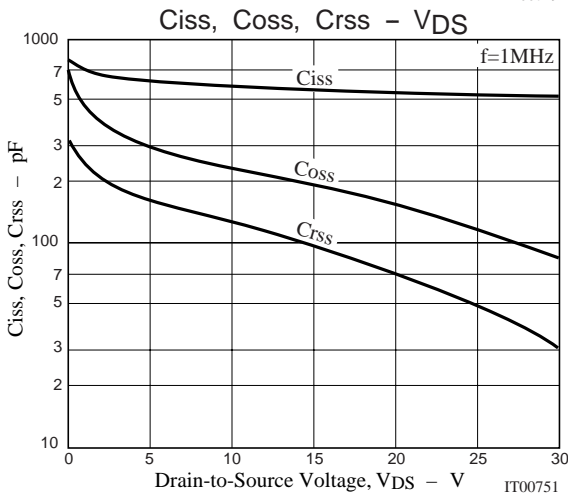
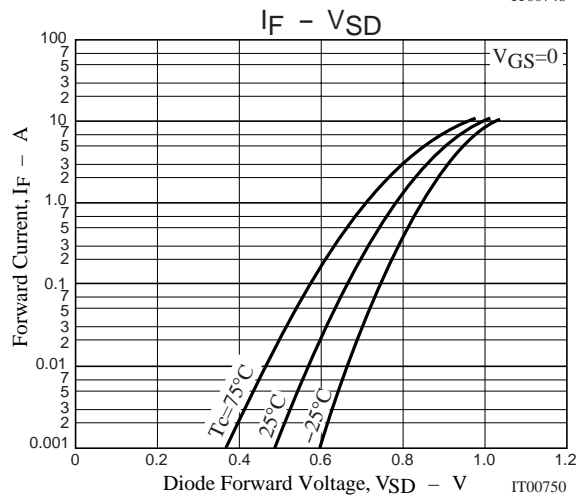
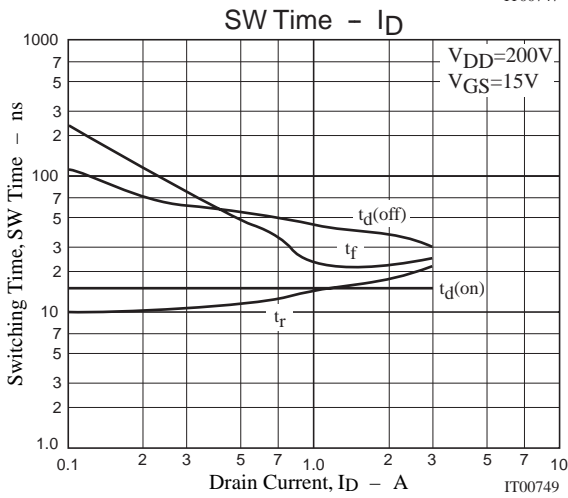
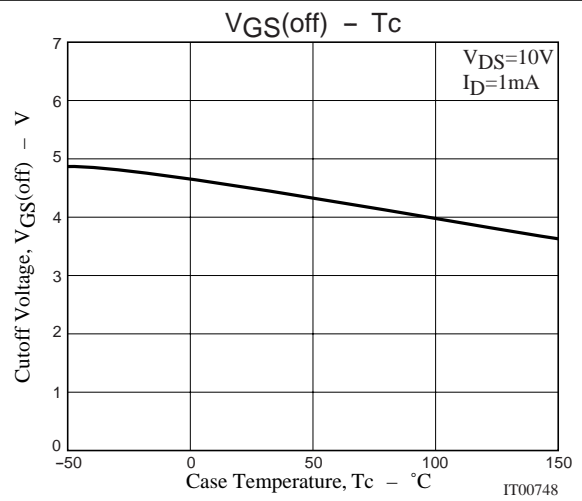
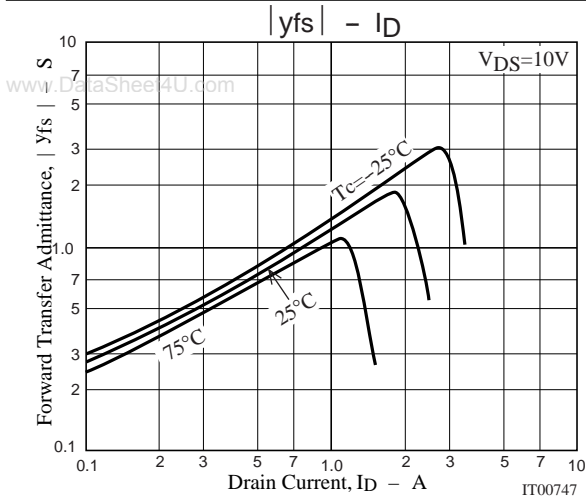
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Total Gate Charge	Qg	V <sub>DS</sub> =200V, V <sub>GS</sub> =10V, I <sub>D</sub> =2.5A		15		nC
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit		15		ns
Rise Time	t <sub>r</sub>	See specified Test Circuit		15		ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	See specified Test Circuit		45		ns
Fall Time	t <sub>f</sub>	See specified Test Circuit		23		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> =2.5A, V <sub>GS</sub> =0	0.84	1.2		V

Marking : K2632

## Switching Time Test Circuit



# 2SK2632LS



## 2SK2632LS

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