

SANYO**2SK1459LS****Ultrahigh-Speed Switching Applications****Features**

- Low ON-resistance.
- Ultrahigh-speed switching.
- Micaless package facilitating mounting.

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Specifications**Absolute Maximum Ratings** at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		900	V
Gate-to-Source Voltage	V _{GSS}		±30	V
Drain Current (DC)	I _D		2.5	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	5	A
Allowable Power Dissipation	P _D		2.0	W
		Tc=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} =0	900			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =900V, V _{GS} =0			1.0	mA
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	2.0		3.0	V
Forward Transfer Admittance	y _{fs}	V _{DS} =20V, I _D =1.5A	0.8	1.5		S

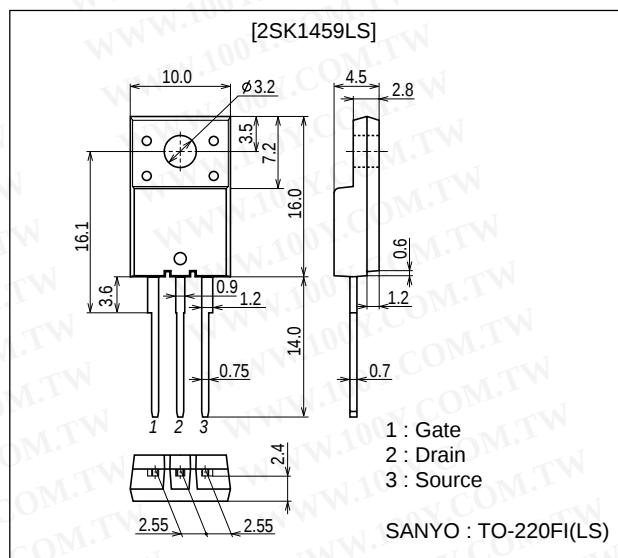
Marking : K1459

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Package Dimensions

unit : mm

2078C



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SANYO Electric Co.,Ltd. Semiconductor Company

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N3001 TS IM TA-3433 / 61599 TH (KT) / 72597 TS (KOTO) / 6131 JN (KOTO) No.3462-1/4

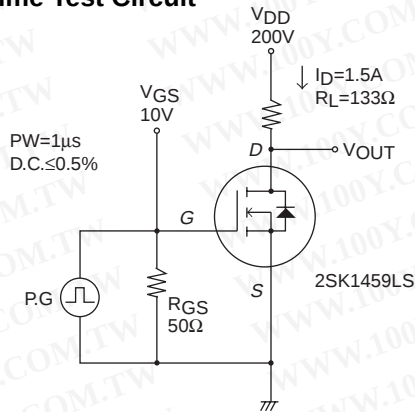
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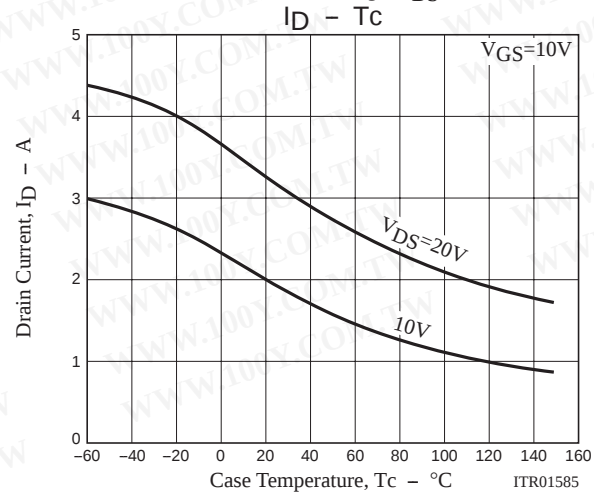
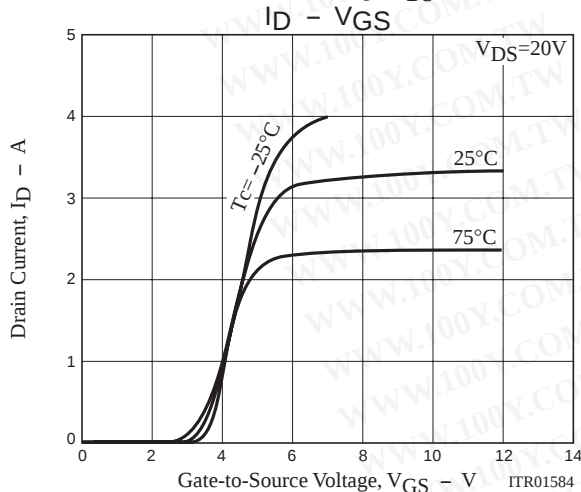
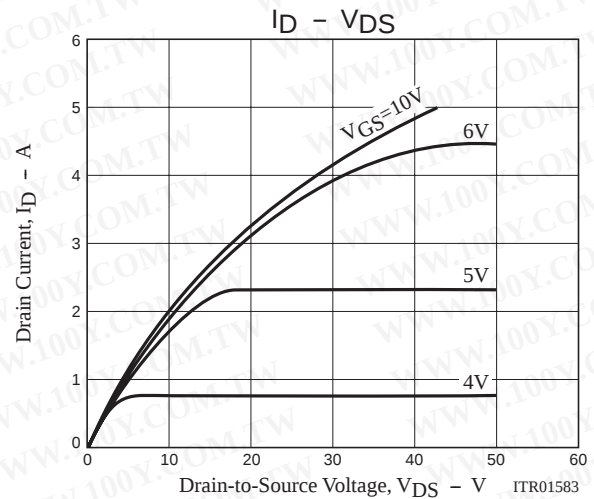
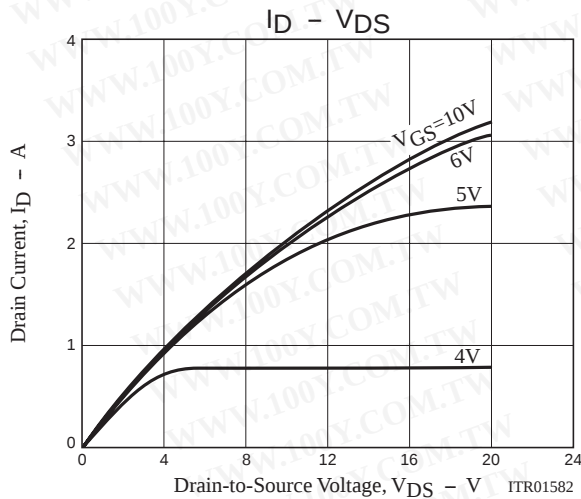
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$I_D=1.5A, V_{GS}=10V$		4.7	60	Ω
Input Capacitance	C_{iss}	$V_{DS}=20V, f=1MHz$		350		pF
Output Capacitance	C_{oss}	$V_{DS}=20V, f=1MHz$		150		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=20V, f=1MHz$		100		pF
Turn-ON Delay Time	$t_d(on)$	$I_D=1.5A, V_{GS}=10V, V_{DD}=200V, R_{GS}=50\Omega$		15		ns
Rise Time	t_r	$I_D=1.5A, V_{GS}=10V, V_{DD}=200V, R_{GS}=50\Omega$		25		ns
Turn-OFF Delay Time	$t_d(off)$	$I_D=1.5A, V_{GS}=10V, V_{DD}=200V, R_{GS}=50\Omega$		120		ns
Fall Time	t_f	$I_D=1.5A, V_{GS}=10V, V_{DD}=200V, R_{GS}=50\Omega$		40		ns
Diode Forward Voltage	V_{SD}	$I_S=2.5A, V_{GS}=0$			1.8	V

(Note) Be careful in handling the 2SK1459LS because it has no protection diode between gate and source.

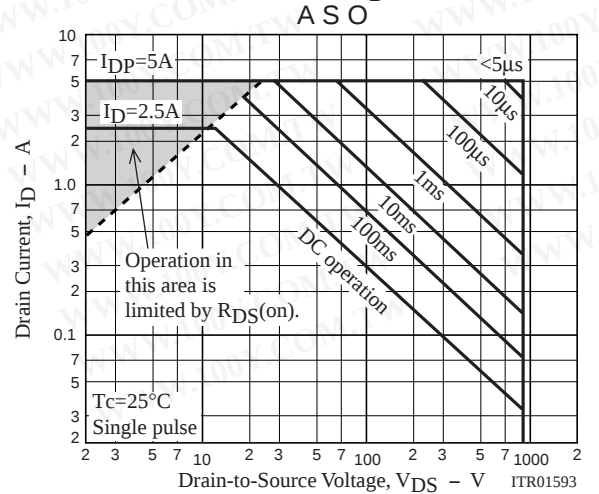
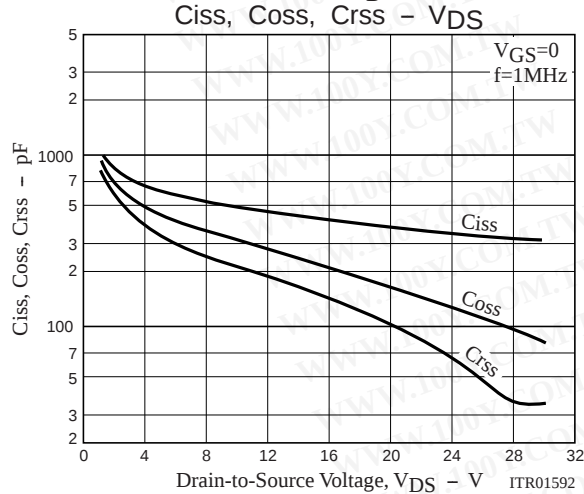
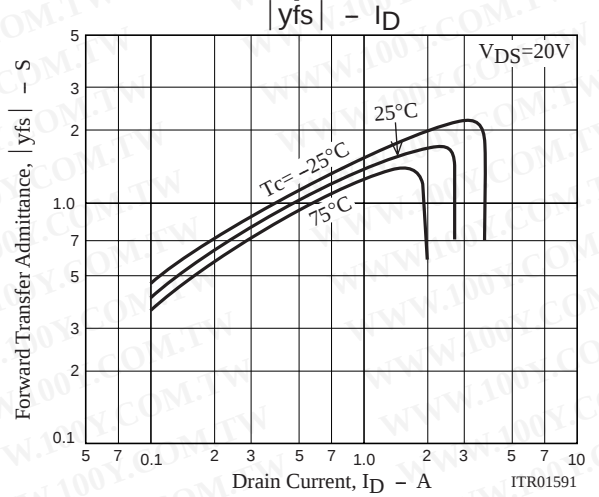
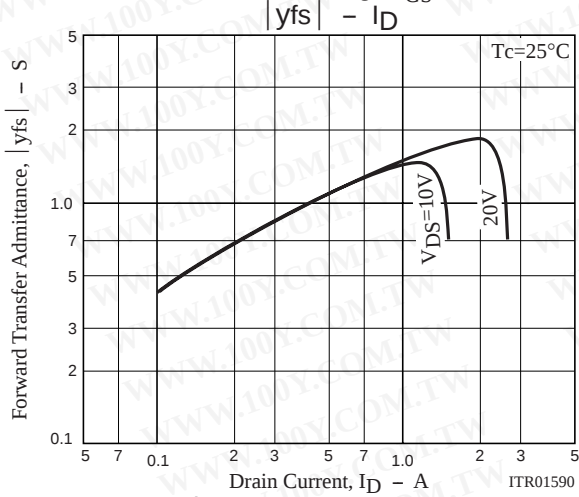
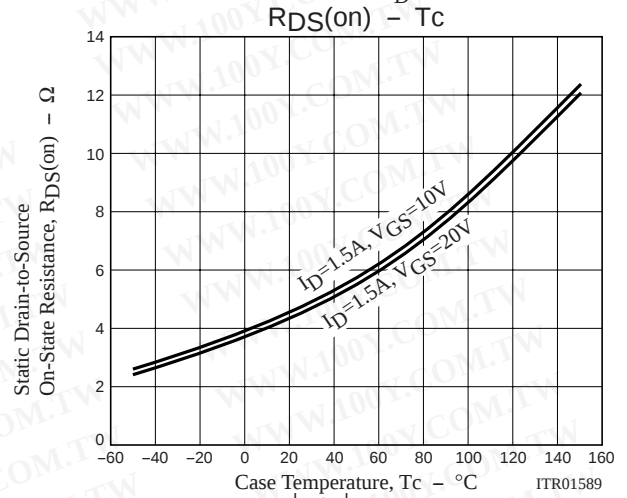
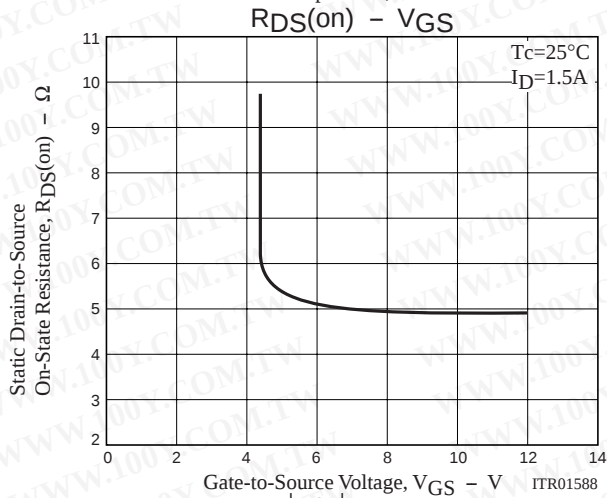
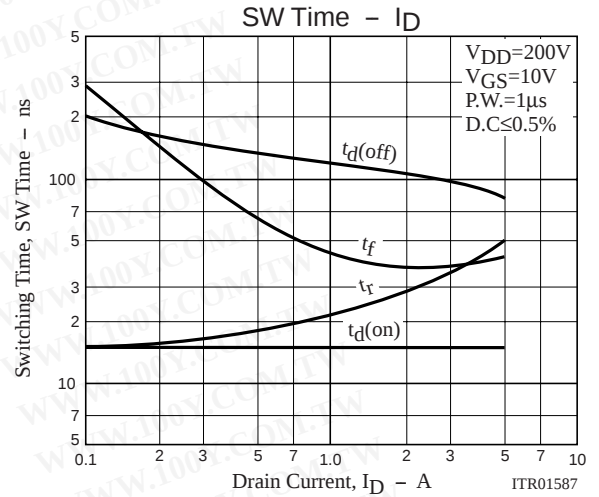
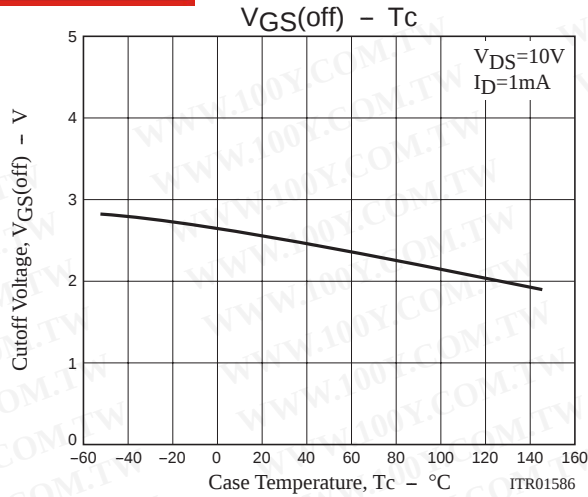
Switching Time Test Circuit



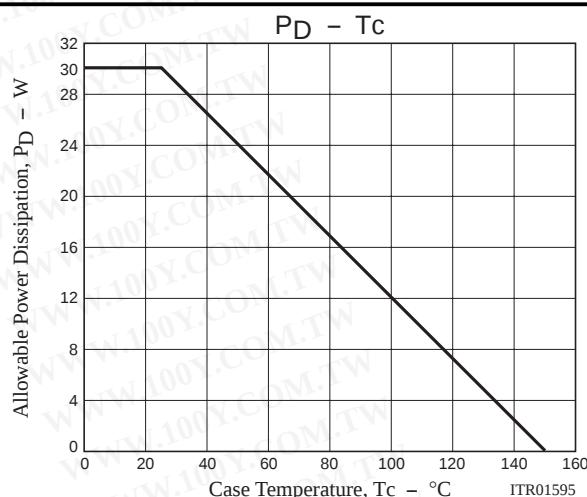
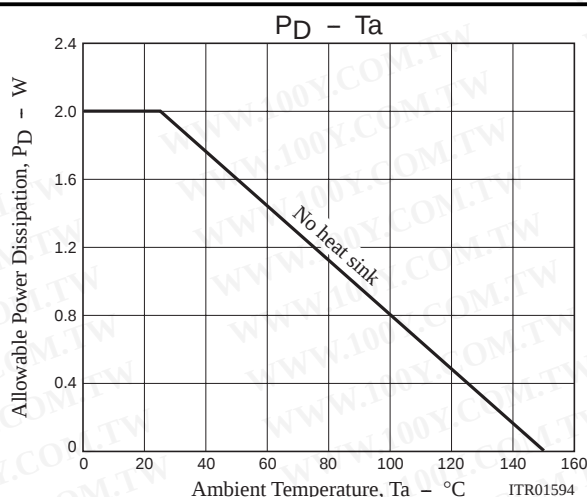
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