



SANYO Semiconductors

DATA SHEET

2SK2624LS — General-Purpose Switching Device Applications

N-Channel Silicon MOSFET

Features

- Low ON-resistance.
- Low Qg.
- Ultrahigh-speed switching.

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		3	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	12	A
Allowable Power Dissipation	P _D		2.0	W
		Tc=25°C	25	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C
Avalanche Energy (Single Pulse) *1	E _{AS}		49	mJ
Avalanche Current *2	I _{AV}		3	A

*1 V_{DD}=50V, L=10mH, I_{AV}=3A

*2 L≤10mH, single pulse

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} =0V	600			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =600V, V _{GS} =0V			1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±30V, V _{DS} =0V			±100	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	3.5		5.5	V

Marking : K2624

Continued on next page.

■ Any and all SANYO Semiconductor Co.,Ltd. products described or contained herein are, with regard to "standard application", intended for the use as general electronics equipment (home appliances, AV equipment, communication device, office equipment, industrial equipment etc.). The products mentioned herein shall not be intended for use for any "special application" (medical equipment whose purpose is to sustain life, aerospace instrument, nuclear control device, burning appliances, transportation machine, traffic signal system, safety equipment etc.) that shall require extremely high level of reliability and can directly threaten human lives in case of failure or malfunction of the product or may cause harm to human bodies, nor shall they grant any guarantee thereof. If you should intend to use our products for applications outside the standard applications of our customer who is considering such use and/or outside the scope of our intended standard applications, please consult with us prior to the intended use. If there is no consultation or inquiry before the intended use, our customer shall be solely responsible for the use.

■ Specifications of any and all SANYO Semiconductor Co.,Ltd. products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.

SANYO Semiconductor Co., Ltd.

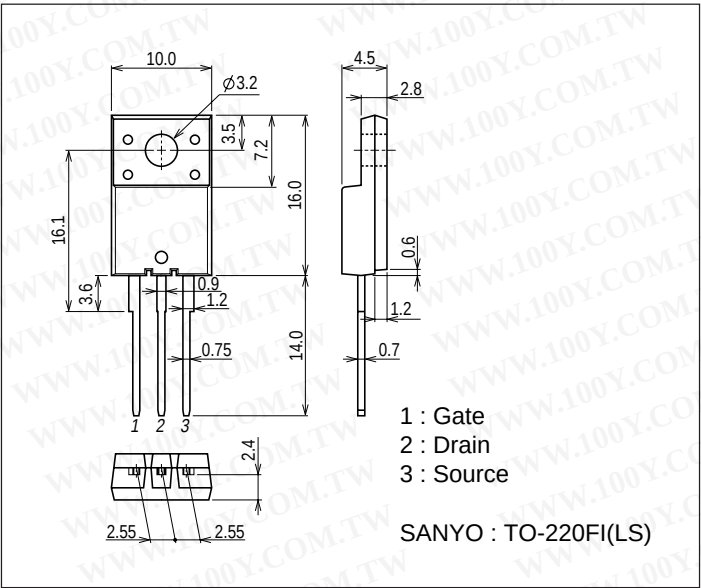
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Continued from preceding page.

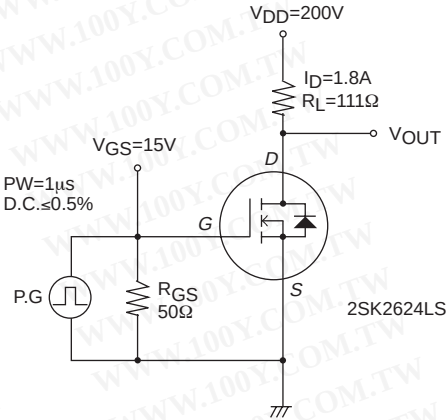
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10V, I_D=1.8A$	1.0	2.0		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$I_D=1.8A, V_{GS}=15V$		2.0	2.6	Ω
Input Capacitance	C_{iss}	$V_{DS}=20V, f=1MHz$		550		pF
Output Capacitance	C_{oss}	$V_{DS}=20V, f=1MHz$		165		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=20V, f=1MHz$		85		pF
Total Gate Charge	Q_g	$V_{DS}=200V, I_D=3A, V_{GS}=10V$		15		nC
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit.		17		ns
Rise Time	t_r	See specified Test Circuit.		17		ns
Turn-OFF Delay Time	$t_d(off)$	See specified Test Circuit.		40		ns
Fall Time	t_f	See specified Test Circuit.		22		ns
Diode Forward Voltage	V_{SD}	$I_S=3A, V_{GS}=0V$		0.98	1.2	V

Package Dimensions

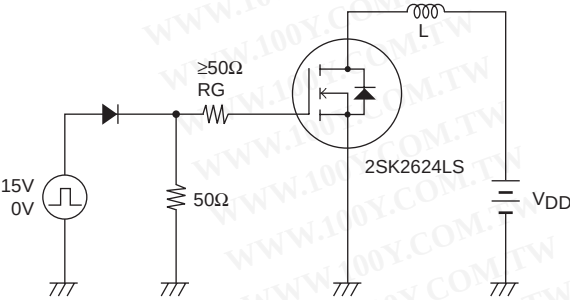
unit : mm (typ)
7509-002



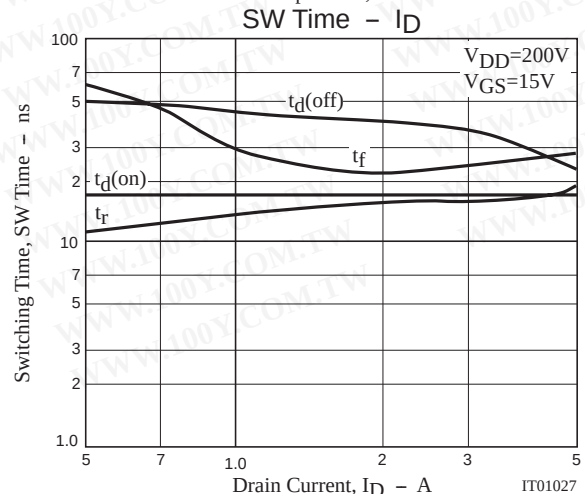
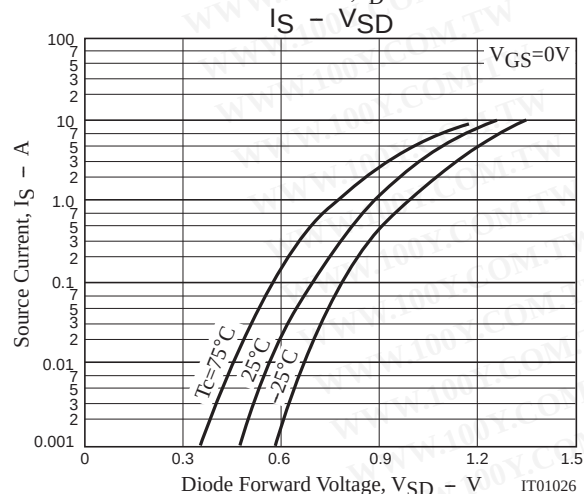
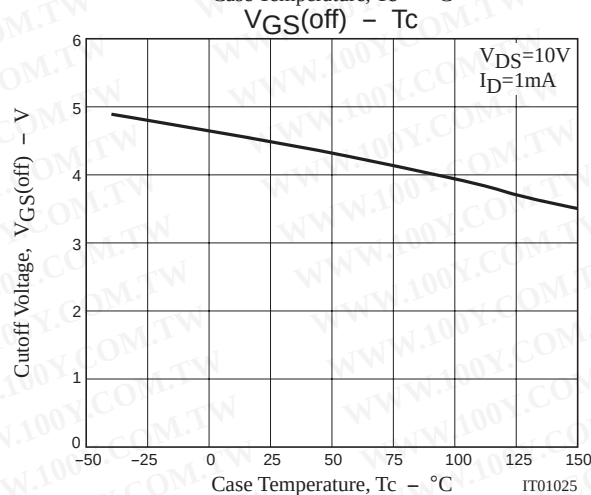
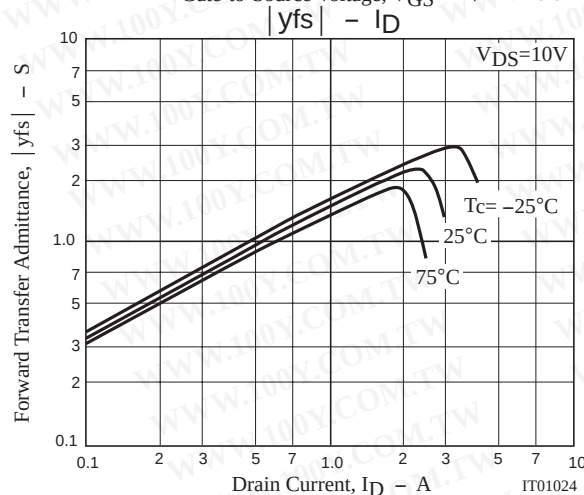
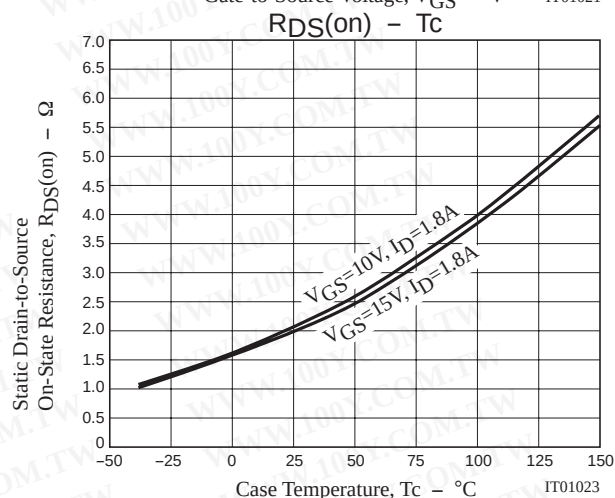
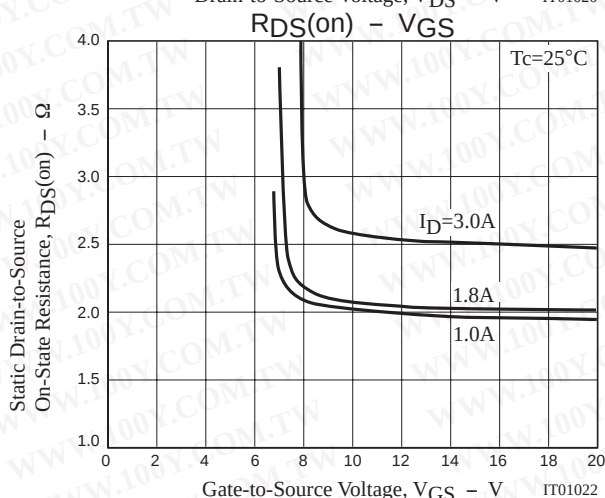
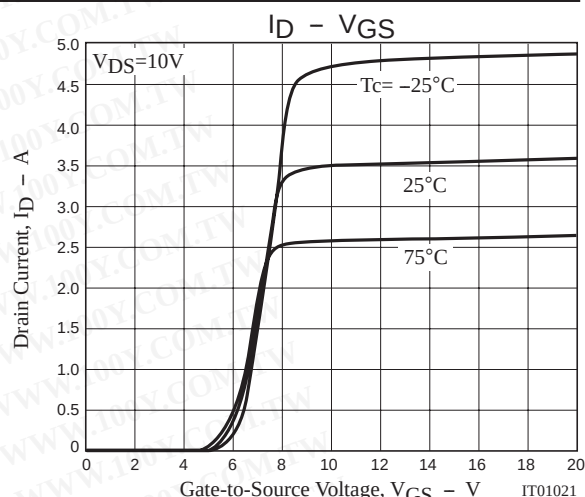
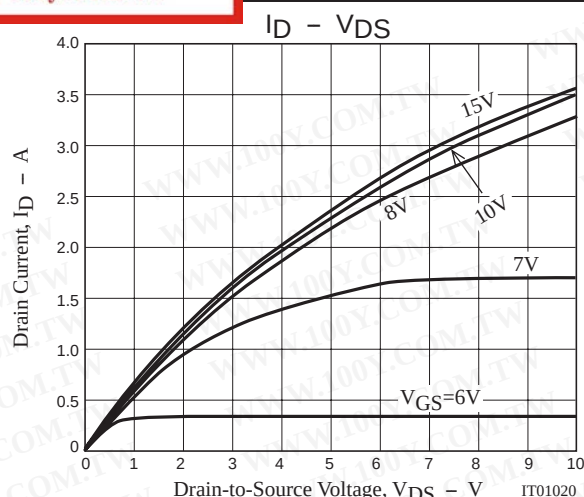
Switching Time Test Circuit

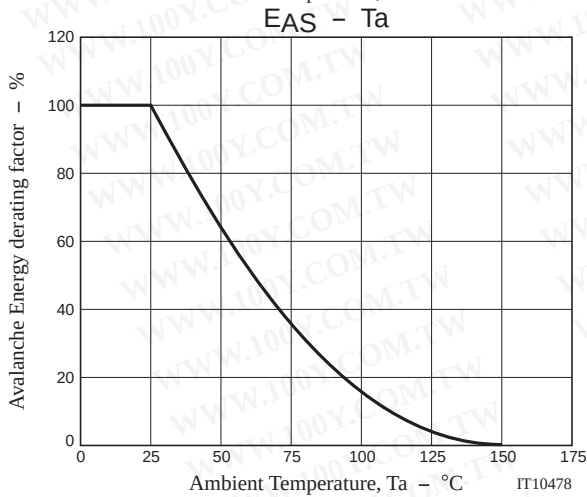
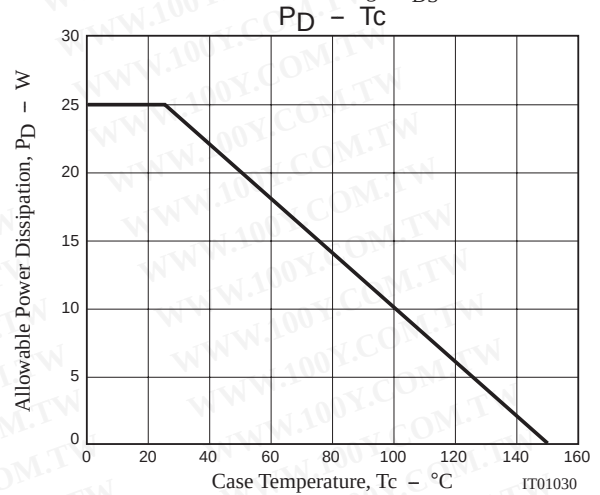
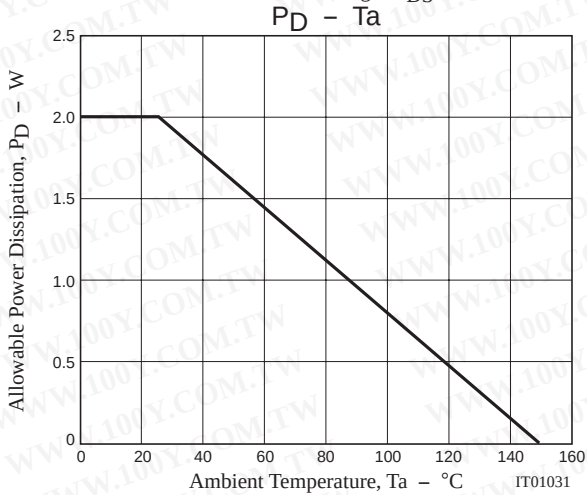
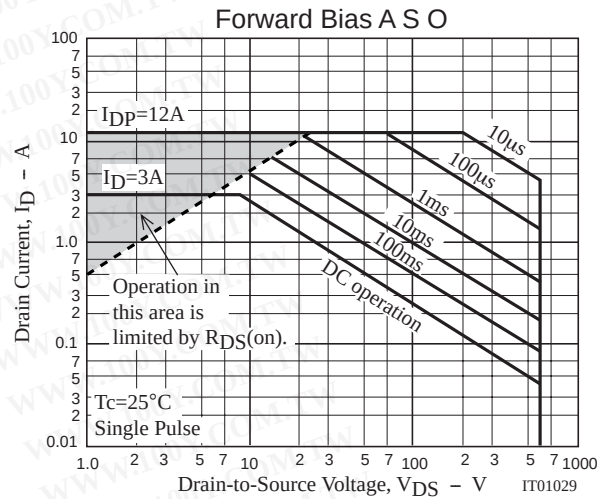
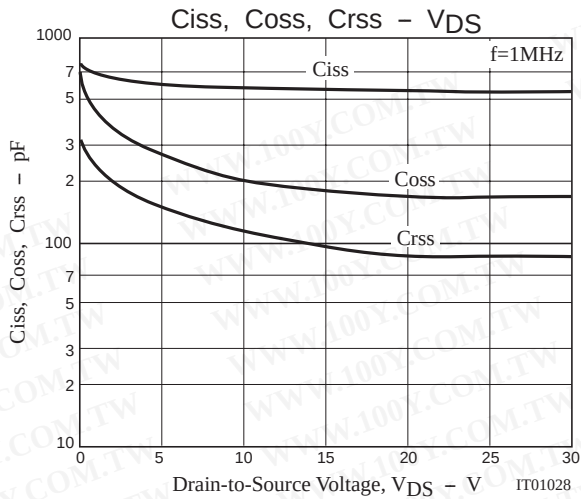


Avalanche Resistance Test Circuit



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)





勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)