



2SK2618LS

N-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

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

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		500	V
Gate-to-Source Voltage	V _{GSS}		±30	V
Drain Current (DC)	I _D		5	A
Drain Current (Pulse)	I _{DP}		20	A
Allowable Power Dissipation	P _D		2.0	W
		T _c =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} =0V	500			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =500V, 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
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, I _D =3A	1.5	3.0		S
Static Drain-to-Source On-State Resistance	R _{DS(on)}	I _D =3A, V _{GS} =15V		0.95	1.25	Ω
Input Capacitance	C _{iss}	V _{DS} =20V, f=1MHz		700		pF
Output Capacitance	C _{oss}	V _{DS} =20V, f=1MHz		250		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =20V, f=1MHz		120		pF
Total Gate Charge	Q _g	V _{DS} =200V, V _{GS} =10V, I _D =5A		20		nC

Continued on next page.

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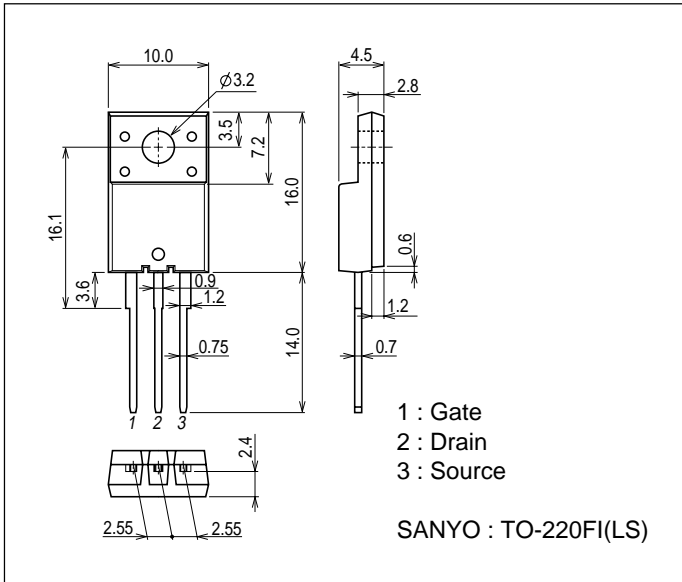
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		20		ns
Rise Time	t_r	See specified Test Circuit.		20		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit.		50		ns
Fall Time	t_f	See specified Test Circuit.		25		ns
Diode Forward Voltage	V_{SD}	$I_S=5A, V_{GS}=0V$			1.2	V

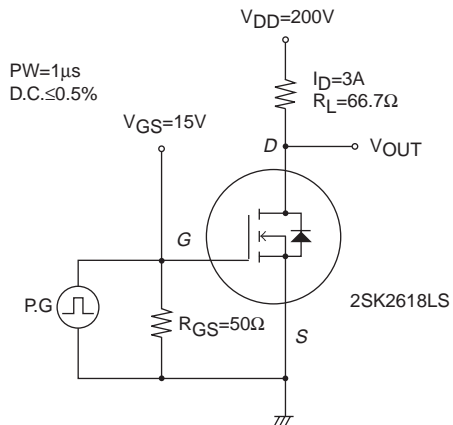
Package Dimensions

unit : mm

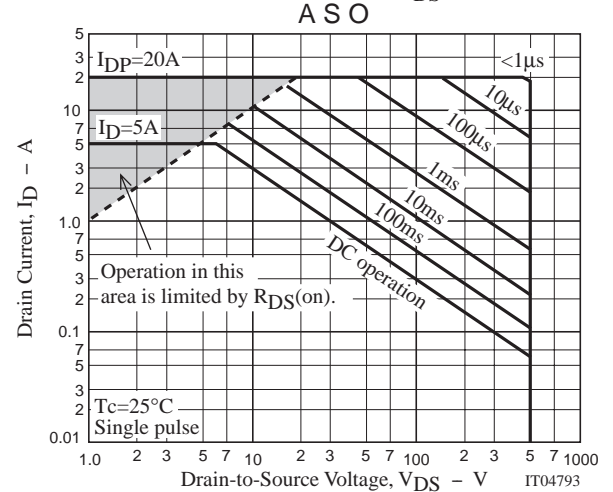
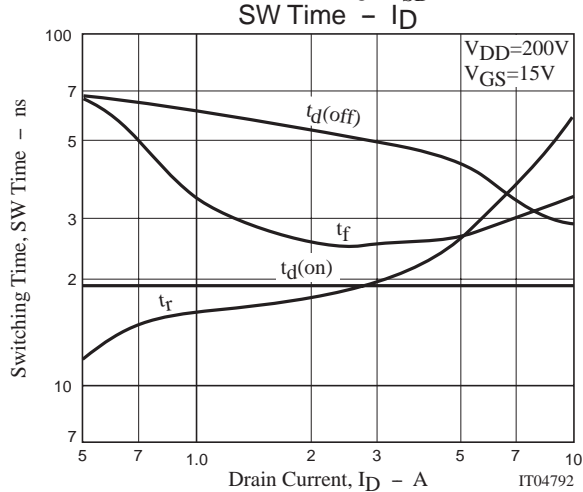
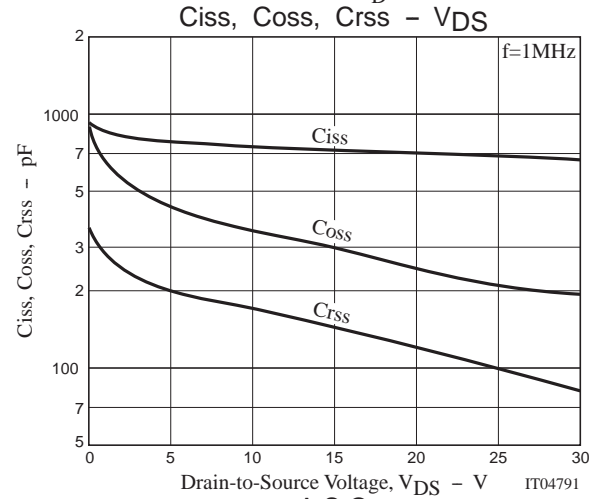
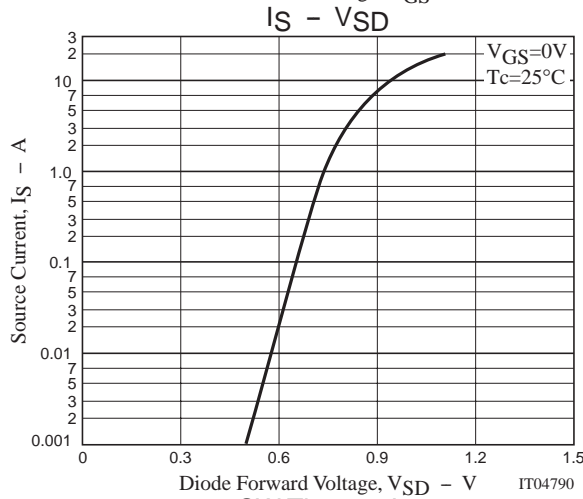
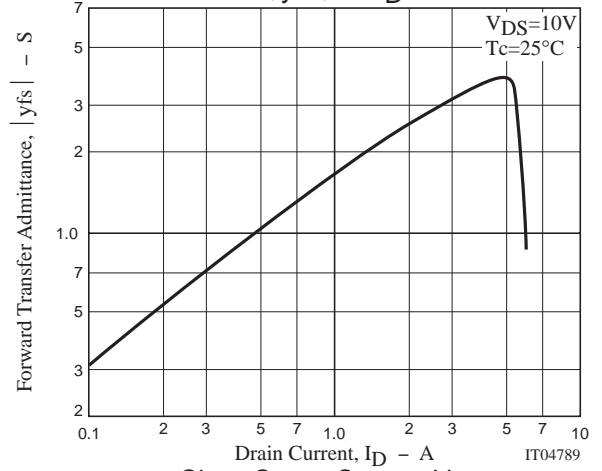
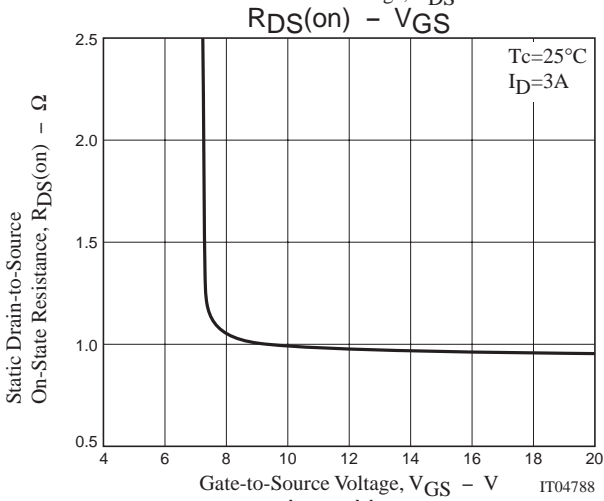
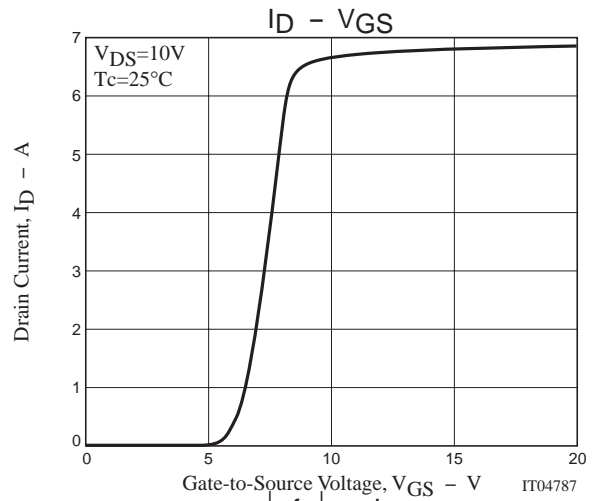
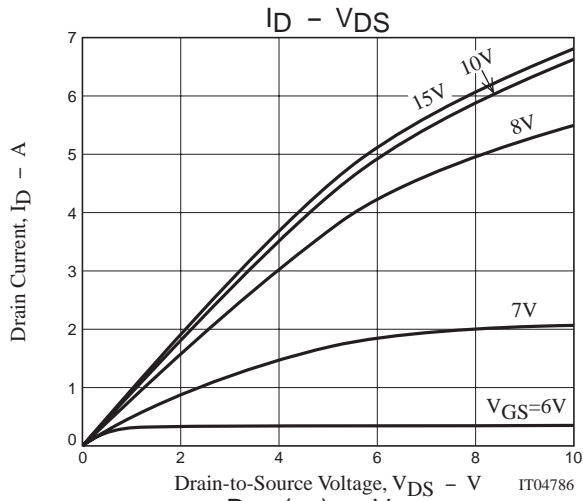
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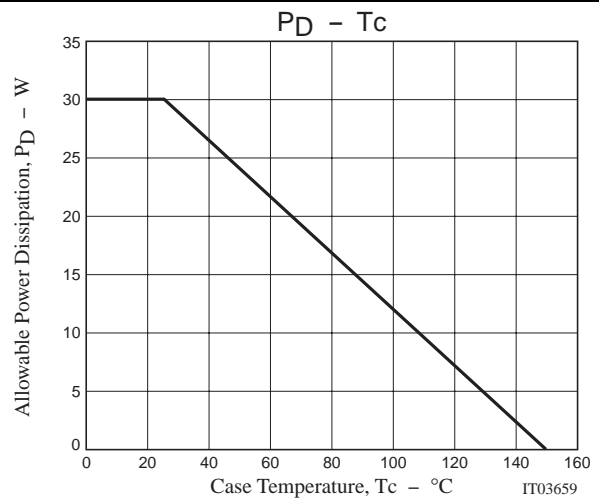
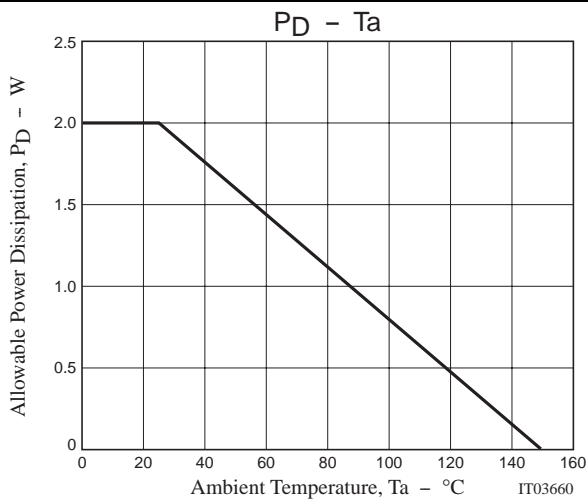
Switching Time Test Circuit



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Note on usage : Since the 2SK2618LS is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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