



SANYO Semiconductors

DATA SHEET

2SK2617LS — N-Channel Silicon MOSFET General-Purpose Switching Device Applications

Features

- Low ON-resistance.
- Low Qg.

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		4	A
Drain Current (Pulse)	I _{DP}		16	A
Allowable Power Dissipation	P _D		2.0	W
		T _c =25°C	25	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 =2A	1.1	2.2		S
Static Drain-to-Source On-State Resistance	R _{DS(on)}	I _D =2A, V _{GS} =15V		1.2	1.6	Ω
Input Capacitance	C _{iss}	V _{DS} =20V, f=1MHz		550		pF
Output Capacitance	C _{oss}	V _{DS} =20V, f=1MHz		190		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =20V, f=1MHz		95		pF
Total Gate Charge	Q _g	V _{DS} =200V, I _D =4A, V _{GS} =10V		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.		25		ns
Diode Forward Voltage	V _{SD}	I _S =4A, V _{GS} =0V		0.95	1.2	V

Marking : K2617

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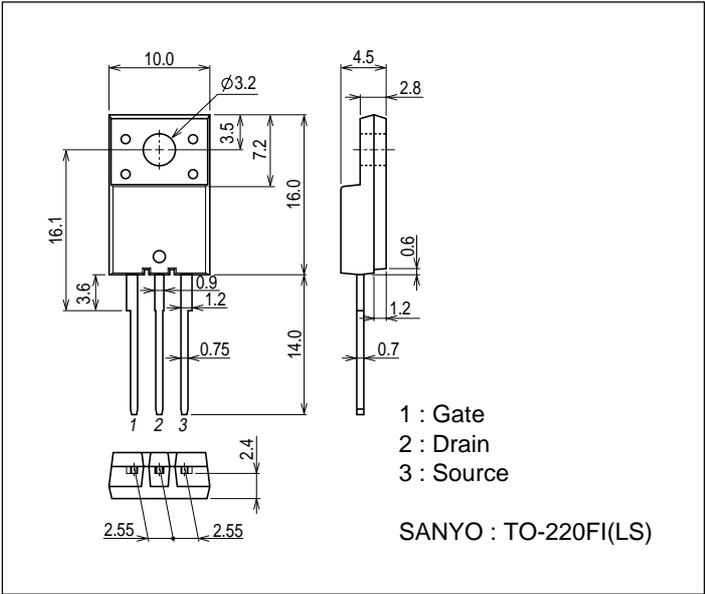
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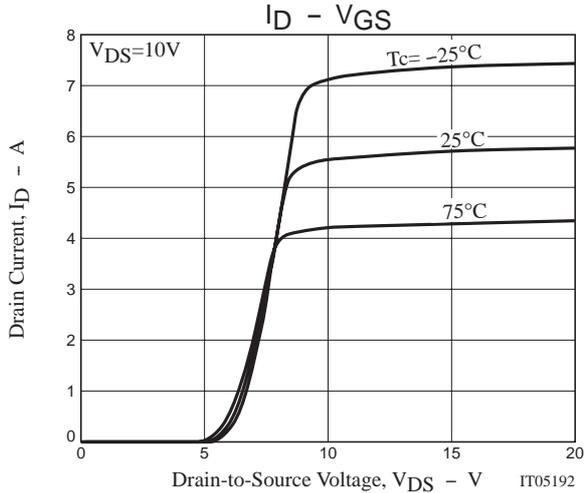
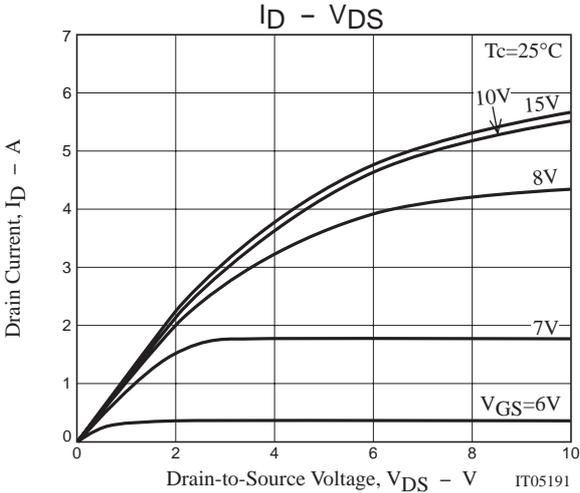
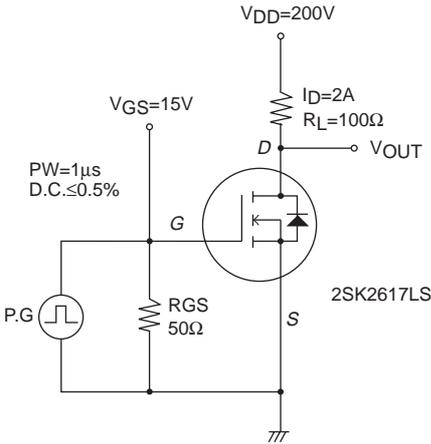
2SK2617LS

Package Dimensions

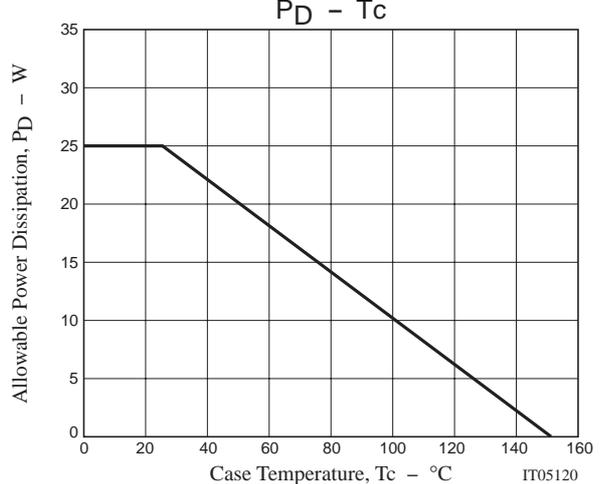
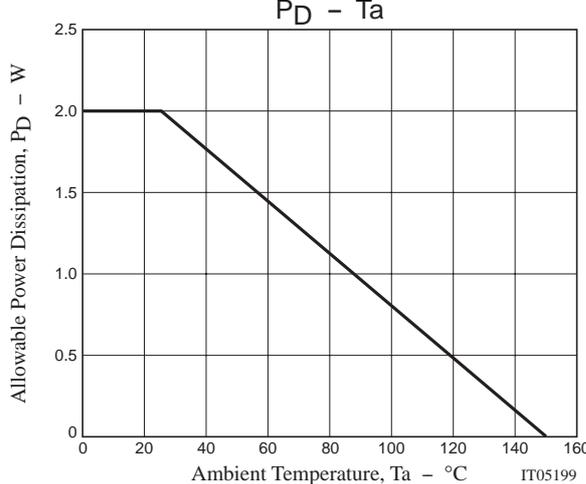
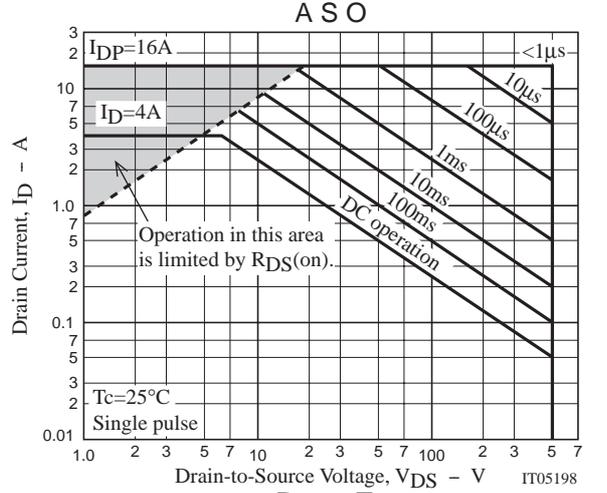
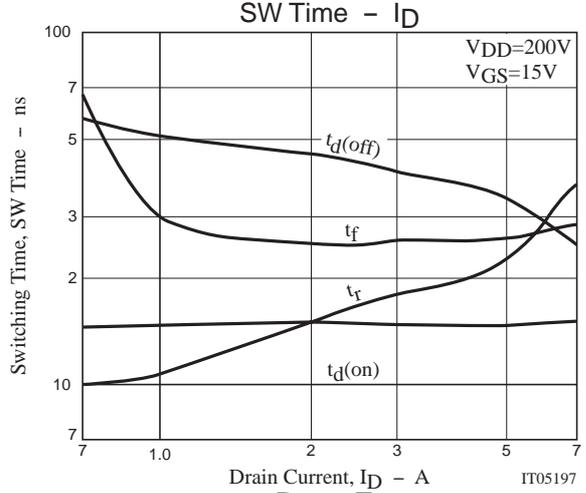
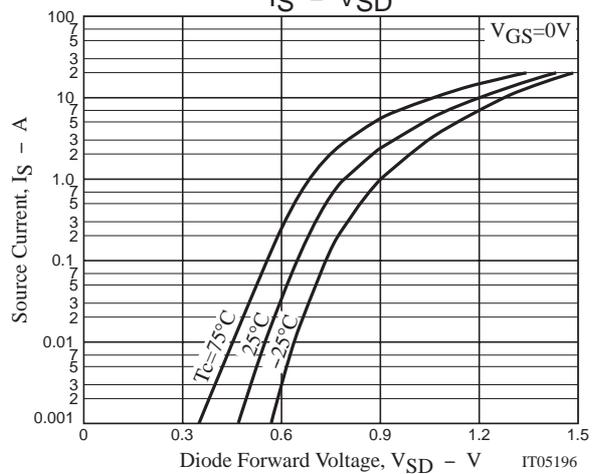
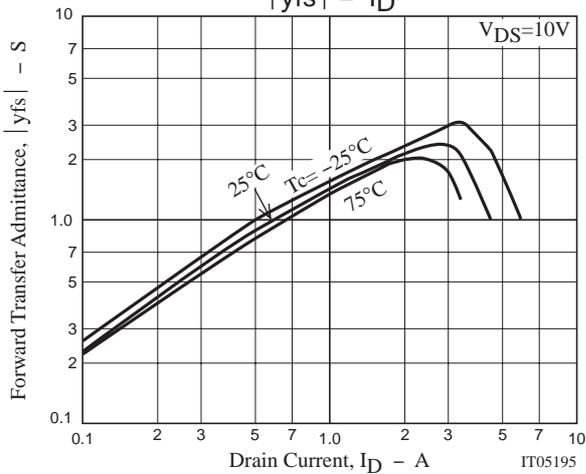
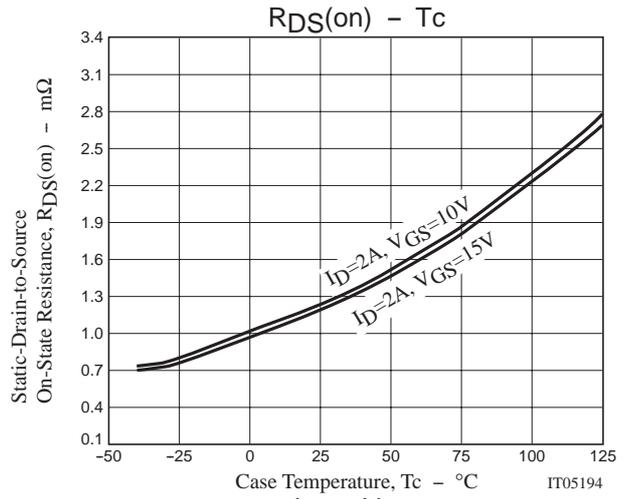
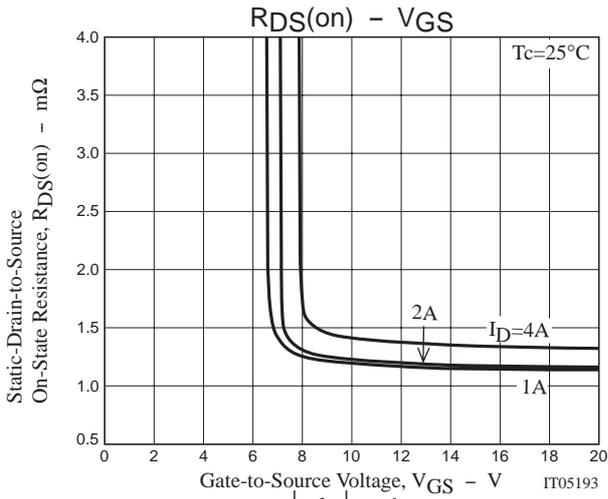
unit : mm
7509-002



Switching Time Test Circuit



2SK2617LS



Note on usage : Since the 2SK2617LS is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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