Ordering number : ENN7081

N-Channel Silicon MOSFET

2SK2625LS

Ultrahigh-Speed Switching Applications

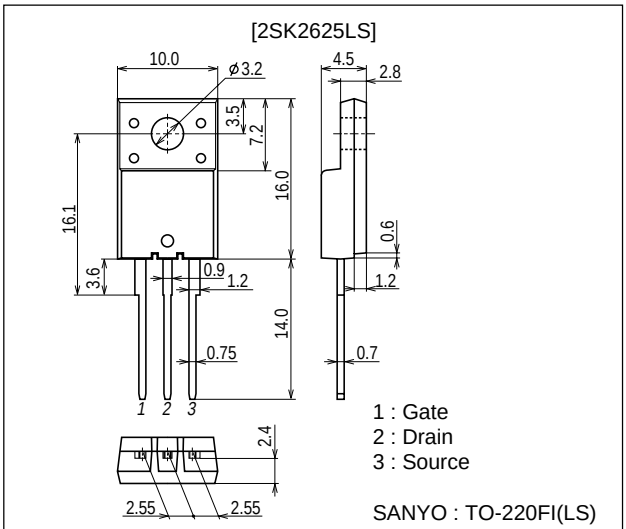
Features

- Low ON-resistance.
- Low Qg.

Package Dimensions

unit : mm

2078C



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		4	A
Drain Current (Pulse)	I_{DP}		16	A
Allowable Power Dissipation	P_D		2.0	W
		Tc=25°C	30	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		–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	600			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=600V, 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	3.5		5.5	V
Forward Transfer Admittance	$\|yfs\|$	V_{DS}=10V, I_D=2.5A	1.5	3.0		S
Static Drain-to-Source On-State Resistance	$R_{DS}(on)$	I_D=2.5A, V_{GS}=15V		1.5	2.0	Ω

Marking : K2625

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		700		pF
Output Capacitance	Coss	V_{DS}=20V, f=1MHz		220		pF
Reverse Transfer Capacitance	Crss	V_{DS}=20V, f=1MHz		110		pF
Total Gate Charge	Qg	V_{DS}=200V, I_D=5A, V_{GS}=10V		20		nC
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}=0		0.88	1.2	V

Switching Time Test Circuit