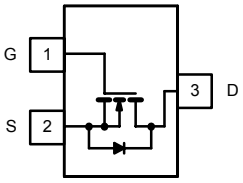
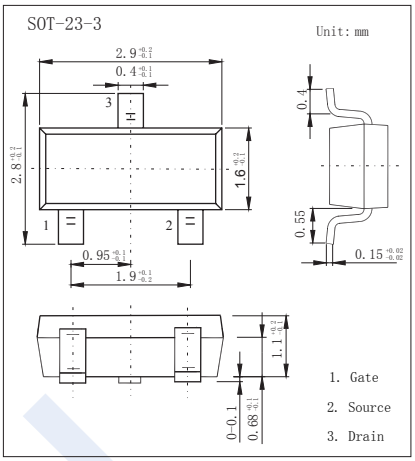
N-Channel Enhancement MOSFET

KI2310DS

■ Features

- V_{DS}=20V
- I_D = 6 .5A
- $R_{DS(on)}$= 22mΩ@V_{GS}=4.5V ,I_D=6.5A
- $R_{DS(on)}$= 30mΩ@V_{GS}=2.5V ,I_D=5.5A





■ Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	20	V
Gate-Source Voltage		V_{GS}	±10	
Continuous Drain Current	TA=25℃	I_D	6.5	A
	TA=70℃		4.8	
Pulsed Drain Current		I_{DM}	30	
Power Dissipation	TA=25℃	P_D	1.3	W
	TA=70℃		0.8	
Junction Temperature		T_J	150	℃
Storage Temperature Range		T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	I_D=250μA, V_{GS}=0V	20			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V, V_{GS}=0V			1	μA
		V_{DS}=20V, V_{GS}=0V, T_J=55℃			10	
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS}=±10V			±10	uA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} , I_D=250μA	0.45		1	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=4.5V, I_D=6.5A			22	mΩ
		V_{GS}=2.5V, I_D=5.5A			30	
Forward Transconductance *1	g_{FS}	V_{DS}=5V, I_D=6.5A		6		S
Maximum Body-Diode Continuous Current	I_S				1.6	A
Diode Forward Voltage	V_{SD}	I_S=1.6A,V_{GS}=0V		0.76	1.2	V

*1: Pulse test: PW ≤300us duty cycle≤ 2%

■ Marking

Marking	2310