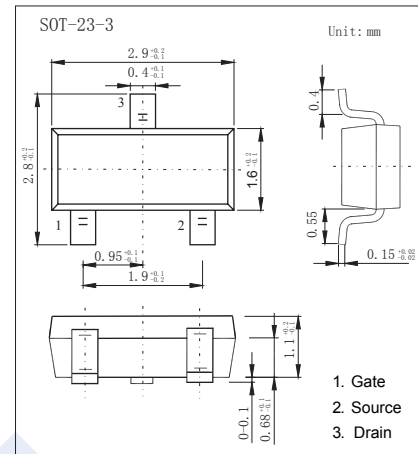


N-Channel MOSFET

KI010NDS

■ Features

- $V_{DS} (V) = 20V$
- $I_D = 6 A$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 12m\Omega$ ($V_{GS} = 4.5V$)
- $R_{DS(ON)} < 18m\Omega$ ($V_{GS} = 2.5V$)



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Voltage	V_{GS}	± 12	
Continuous Drain Current	I_D	6	A
Power Dissipation	P_D	2	W
Thermal Resistance, Junction- to-Ambient	R_{thJA}	62.5	$^\circ C/W$
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = 250\mu A$, $V_{GS} = 0V$	20			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 20V$, $V_{GS} = 0V$, $T_J = 25^\circ C$			1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 12V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$, $I_D = 250\mu A$	0.5		1	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 4.5V$, $I_D = 6A$			12	m Ω
		$V_{GS} = 2.5V$, $I_D = 5A$			18	

■ Marking

Marking	010N
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