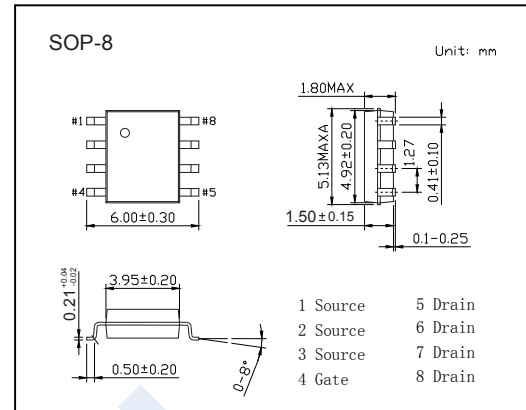


N-Channel MOSFET

KI7N10DY

■ Features

- $V_{DS}(V) = 100V$
- $I_D = 7A$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 350m\Omega$ ($V_{GS} = 10V$)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	7	A
Pulsed Drain Current	I_{DM}	30	
Power Dissipation	P_D	2	W
Thermal Resistance Junction- to-Ambient	R_{thJA}	48	$^\circ C/W$
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}	$I_D = 250 \mu A$, $V_{GS} = 0V$	100			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 80V$, $V_{GS} = 0V$			1	μA
		$V_{DS} = 80V$, $V_{GS} = 0V$, $T_c = 85^\circ C$			30	
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 20V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$, $I_D = 250 \mu A$	1		3	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 10V$, $I_D = 3.5A$			350	m Ω
Maximum Body-Diode Continuous Current	I_S				7	A
Diode Forward Voltage	V_{SD}	$I_S = 7A$, $V_{GS} = 0V$		0.8	1.3	V

Pulse test ; pulse width $\leq 300\mu s$, duty cycle $\leq 2\%$ ($T_a = 25^\circ C$ Unless Otherwise Noted)

■ Marking

Marking	7N10
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