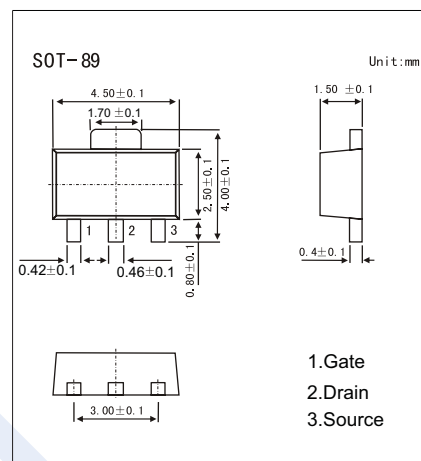
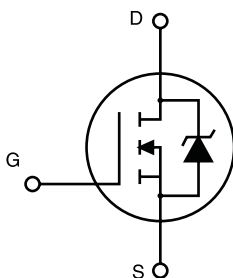


N-Channel Power MOSFET

KI1N60

■ Features

- $V_{DS} (V) = 600V$
- $I_D = 1 A$
- $R_{DS(ON)} < 10.5 \Omega$ ($V_{GS} = 10V$)

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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	600	V
Gate-Source Voltage	V_{GS}	± 30	
Continuous Drain Current	I_D	$T_C = 25^\circ C$	1
		$T_C = 100^\circ C$	0.7
Pulsed Drain Current	I_{DM}	4	A
Power Dissipation	P_{tot}	3	W
Single Pulse Avalanche Energy	E_{AS}	30	mJ
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}	$I_D = 250 \mu A, V_{GS} = 0V$	600			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 600V, V_{GS} = 0V, T_C = 25^\circ C$			1	μA
		$V_{DS} = 480V, V_{GS} = 0V, T_C = 125^\circ C$			100	
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 30V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250 \mu A$	2		4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 10V, I_D = 0.5A$			10.5	Ω
Input Capacitance	C_{iss}	$V_{GS} = 0V, V_{DS} = 25V, f = 1MHz$		150		pF
Output Capacitance	C_{oss}			25		
Reverse Transfer Capacitance	C_{rss}			4		
Diode Forward Voltage	V_{SD}	$I_S = 1A, V_{GS} = 0V$			1.5	V

Note: Pulse test $t_p \leq 300 \mu s, \delta \leq 2\%$

■ Marking

Marking	1N60

N-Channel Power MOSFET

KI1N60

■ Typical Characteristics

Figure 1. Typical Output Characteristics

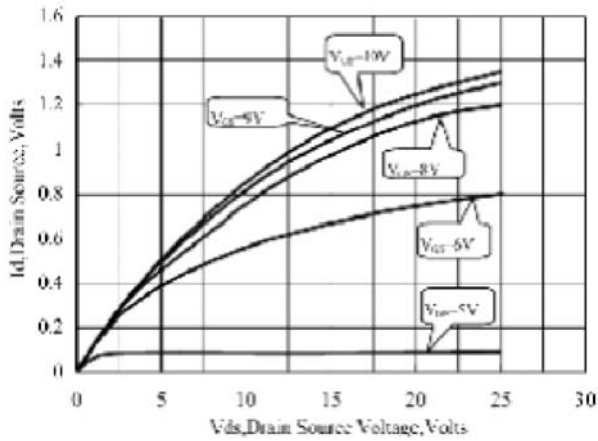


Figure 2. On-Resistance vs. Gate Voltage

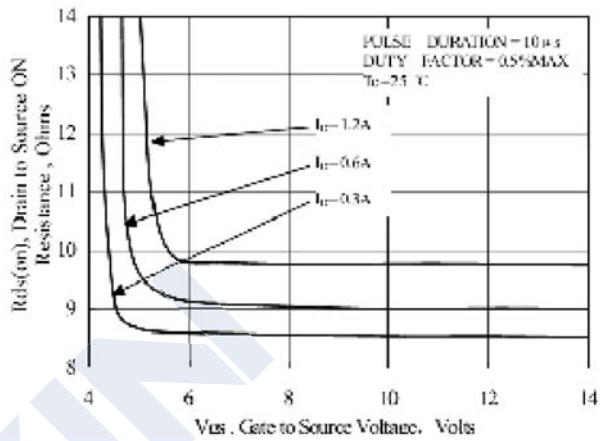


Figure 3. On-Resistance vs. Drain Current

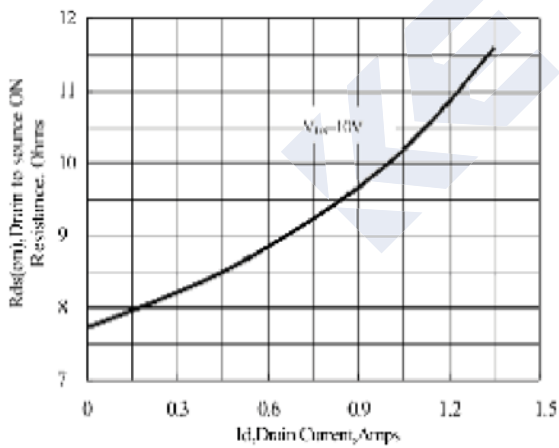


Figure 4. On-Resistance Variation with Temperature

