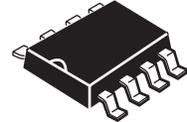
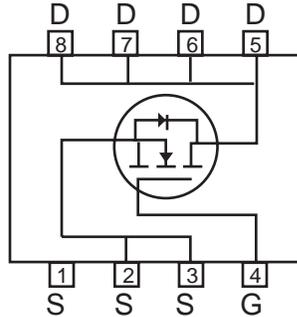


## N-Channel Enhancement Mode MOSFET

### Features

- 20V/6.0A  
 $R_{DS(ON)}=40m.$  (Typ.) @  $V_{GS}=4.5V, I_D=6A$   
 $R_{DS(ON)}=45m.$  (Typ.) @  $V_{GS}=2.5V, I_D=5.2A$
- Super High Dense Cell Design for Extremely Low  $R_{DS(ON)}$
- Reliable and Rugged
- SOP-8 Package

### Pin Description



Top View of SOP-8

### Applications

- Power Management in Notebook Computer  
 Portable Equipment and Battery Powered Systems.

### Electrical Characteristics ( $T_A = 25^\circ C$ unless otherwise noted)

Symbol	Parameter	Test Condition	NK9410			Unit
			Min.	Typ.	Max.	
<b>Static</b>						
$BV_{DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_D=250\mu A$	16			V
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=12V, V_{GS}=0V$			1	$\mu A$
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}, I_{DS}=250\mu A$	0.4		1.3	V
$I_{GSS}$	Gate Leakage Current	$V_{GS}=\pm 8V, V_{DS}=0V$			$\pm 100$	nA
$R_{DS(ON)}$	Drain-Source On-State Resistance	$V_{GS}=4.5V, I_{DS}=6A$		40	50	m $\Omega$
		$V_{GS}=2.5V, I_{DS}=5.2A$		45	55	
$V_{SD}$	Diode Forward Voltage	$I_{SD}=1.5A, V_{GS}=0V$			1.2	V

### Absolute Maximum Ratings ( $T_A = 25$ unless otherwise noted)

Symbol	Parameter	Rating	Unit
$V_{DSS}$	Drain-Source Voltage	20	V
$V_{GSS}$	Gate-Source Voltage	$\pm 8$	
$I_D^*$	Maximum Drain Current – Continuous	6	A
$I_{DM}$	Maximum Drain Current – Pulsed	20	

\* Surface Mounted on FR4 Board,  $t \leq 10$  sec.