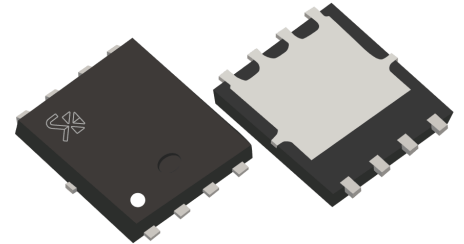


## N-Channel MOSFET

### Feature

- 40V N-Channel MOSFET
- $R_{DS(ON)} = 13m(\text{typ.}) @ V_{GS} = 10V$
- $R_{DS(ON)} = 15m(\text{typ.}) @ V_{GS} = 4.5V$
- Reliable and Rugged



### Applications

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

PDFN3\*3

#### 1. Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ Unless Otherwise Noted)

Symbol	Parameter	Rating	Unit
$V_{DSS}$	Drain-Source Voltage	40	V
$V_{GSS}$	Gate-Source Voltage	$\pm 20$	
$I_D$	Continue Drain Current	30	A
$I_{DM}^a$	Pulsed Drain Current	120	
$T_J$	Maximum Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature Range	-55 to 150	

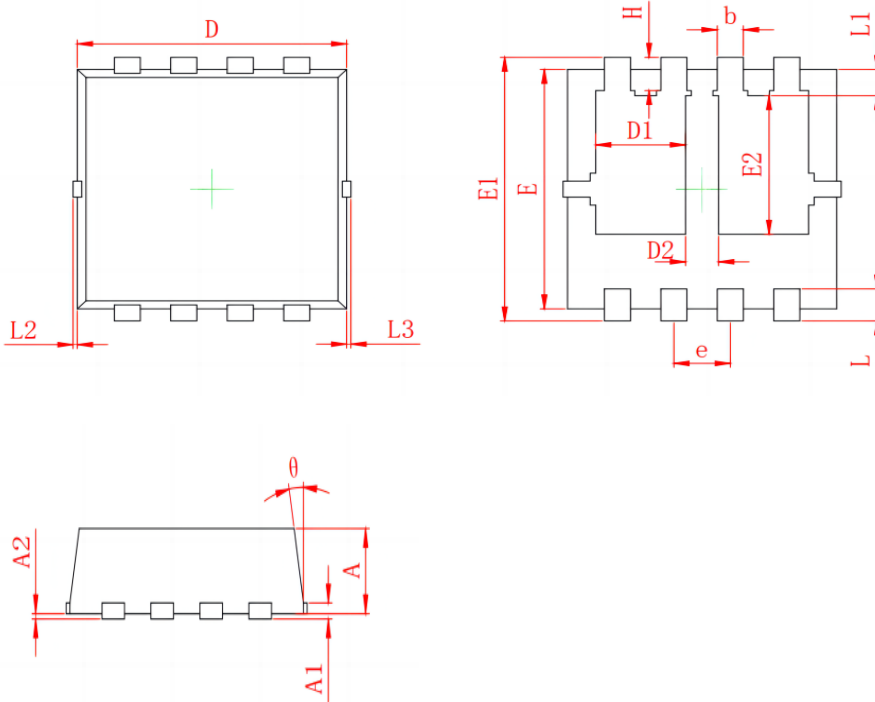
#### 2. Static Electrical Characteristics ( $T_A=25^\circ\text{C}$ Unless Otherwise Noted)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
<b>Static Characteristics</b>						
$BV_{DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_{DS}=250\mu\text{A}$	40	-	-	V
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=32V, V_{GS}=0V$ $T_J=85^\circ\text{C}$	-	-	1	$\mu\text{A}$
			-	-	30	
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}, I_{DS}=250\mu\text{A}$	1	1.6	2	V
$I_{GSS}$	Gate Leakage Current	$V_{GS}=\pm 20V, V_{DS}=0V$	-	-	$\pm 100$	nA
$R_{DS(ON)}$	Drain-Source On-state Resistance	$V_{GS}=10V, I_{DS}=0.5A$	-	13	15	m $\Omega$
		$V_{GS}=4.5V, I_{DS}=0.5A$	-	15	20	
$V_{SD}$	Diode Forward Voltage	$I_{SD}=0.5A, V_{GS}=0V$	-	0.7	1.3	V

\*Note:

a : Current maybe limit by bonding wire

## Package PDFN3\*3



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.700	0.900
A1	0.152 REF.	
A2	0~0.05	
D	3.000	3.200
D1	0.935	1.135
D2	0.280	0.480
E	2.900	3.100
E1	3.150	3.450
E2	1.535	1.935
b	0.200	0.400
e	0.550	0.750
L	0.300	0.500
L1	0.180	0.480
L2	0~0.100	
L3	0~0.100	
H	0.315	0.515
$\theta$	8°	12°