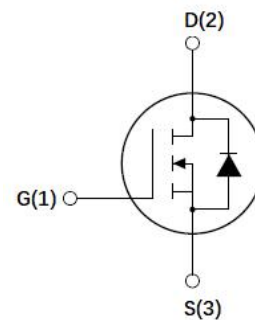
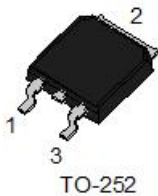


**80N06****N-Channel Mode Power MOSFET****Features**

- $R_{DS(ON)} < 8m\Omega @ V_{GS}=10V$
- $V_{DS}=60V, I_D=80A$

Application

- Load switch
- Uninterruptible power supply

Package**Package Marking and Ordering Information**

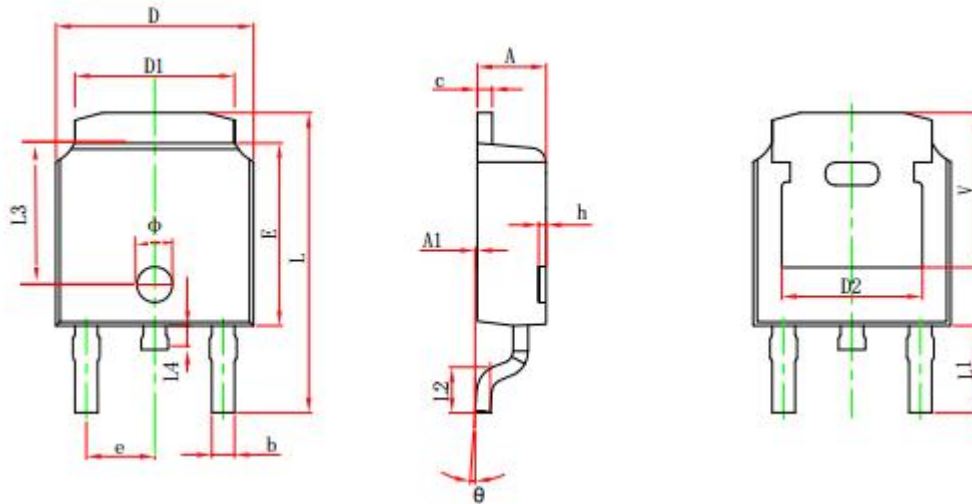
Product ID	PACK	Qty (pcs)
80N06	TO-252	2500

MAXIMUM RATINGS($T_a=25^{\circ}C$ unless otherwise noted)

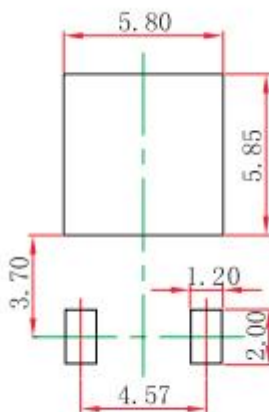
Symbol	Parameter	Value	Unit
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Continuous Drain Current	80	A
I_{DM}	Pulsed Drain Current	200	A
P_D	Power Dissipation	60	W
T_j	Junction Temperature	-55 to 150	$^{\circ}C$
T_{stg}	Storage Temperature	-55 to 150	
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	62	$^{\circ}C/W$
$R_{\theta JC}$	Thermal Resistance From Junction To Case	2.1	$^{\circ}C/W$

**80N06*****N-Channel Mode Power MOSFET*****MOSFET ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Off characteristics						
Drain-Source breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=250\mu A$	60			V
Zero gate voltage drain current	I_{DSS}	$V_{DS}=60V, V_{GS}=0V$ $T_J=25^\circ C$			1	μA
Gate-body leakage current	I_{GSS}	$V_{DS}=0V, V_{GS}=\pm 20V$			± 100	nA
On characteristics						
Gate-threshold voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	2.0		4.0	V
Non-triggering gate voltage	$R_{DS(on)}$	$V_{GS}=10V, I_D=40A$		7	8	m Ω
		$V_{GS}=4.5V, I_D=40A$		5.5	6	m Ω
Forward Transconductance	g_{fs}	$V_{DS}=10V, I_D=40A$	15			S
Drain-Source Diode Characteristics						
Drain-Source diode forward Voltage	V_{SD}	$V_{GS}=0V, I_S=45A$			1.4	V
Continuous drain-source diode forward current	I_S				60	A

**80N06****N-Channel Mode Power MOSFET****TO-252-2L Package Outline Dimensions**

Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.635	0.770	0.025	0.030
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.712	10.312	0.382	0.406
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	4.460 REF.		0.1756 REF.	
L4	0.600	1.000	0.024	0.039
phi	1.100	1.300	0.043	0.051
theta	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.250 REF.		0.207 REF.	

TO-252-2L Suggested Pad Layout**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.