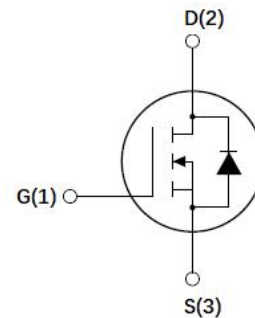
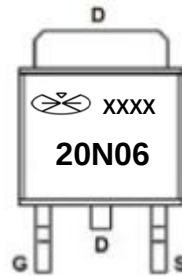
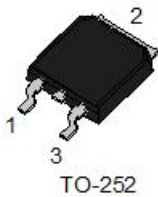


**20N06****N-Channel Mode Power MOSFET****Features**

- $R_{DS(ON)} < 30m\Omega @ V_{GS}=10V$
- $V_{DS}=60V, I_D=20A$

Application

- Battery protection
- Uninterruptible power supply

Package**Package Marking and Ordering Information**

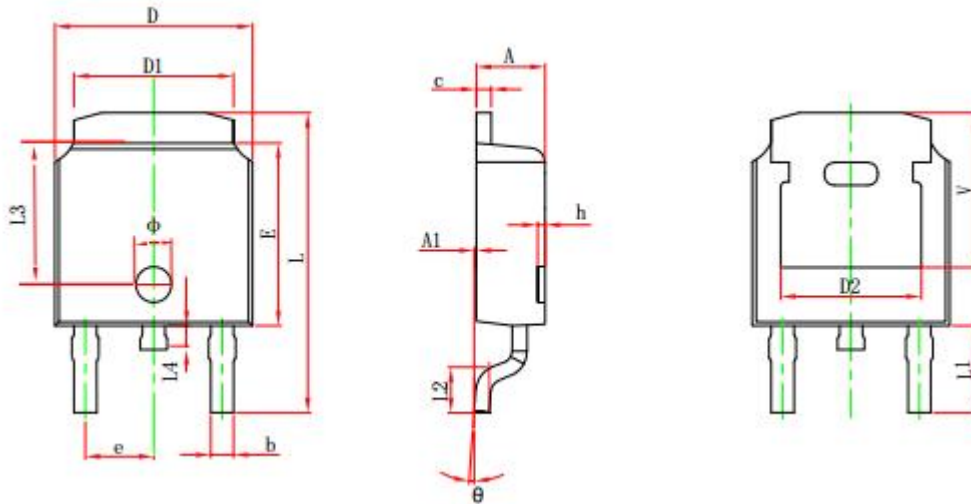
Product ID	PACK	Qty (pcs)
20N06	TO-252	2500

MAXIMUM RATINGS(Ta=25℃ unless otherwise noted)

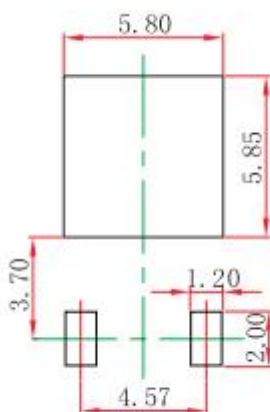
Symbol	Parameter	Value	Unit
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Continuous Drain Current($T_c=25^\circ C, T_J=150^\circ C$)	20	A
I_{DM}	Pulsed Drain Current	46	A
P_D	Power Dissipation	34.7	W
T_J	Junction Temperature	-55 to 150	℃
T_{stg}	Storage Temperature	-55 to 150	
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	62	℃/W
$R_{\theta JC}$	Thermal Resistance From Junction To Case	3.6	℃/W

**20N06*****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	BV _{DSS}	V _{GS} =0V, I _D =250μA	60			V
Drain-Source diode forward Voltage	V _{SD}	V _{GS} =0V, I _S =1.0A			1.2	V
Zero gate voltage drain current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			1.0	μA
	I _{DSS}	V _{DS} =60V, V _{GS} =0V, T _J =55°C			5.0	μA
Gate-body leakage current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
On characteristics						
Gate-threshold voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	1.2		2.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =20A		24	30	mΩ
	R _{DS(on)}	V _{GS} =4.5V, I _D =10A		31	40	mΩ
Forward transconductance	g _{FS}	V _{DS} =5V, I _D =15A		17		S

**20N06****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
Φ	1.100	1.300	0.043	0.051
θ	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.