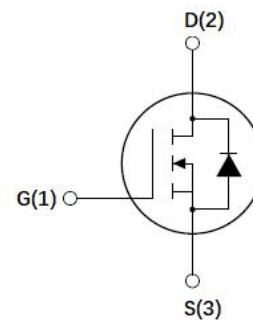
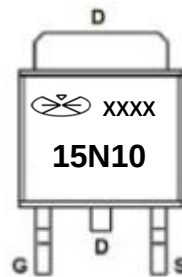
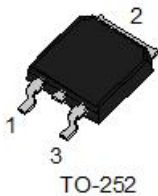


**15N10****N-Channel Mode Power MOSFET****Features**

- $R_{DS(ON)}=0.11\Omega@V_{GS}=10V$
- Lower gate charge(Typ=24nC)
- Lower C_{RSS} (Typ=23pF)
- High switching speed

Application

- Power switching application

Package**Package Marking and Ordering Information**

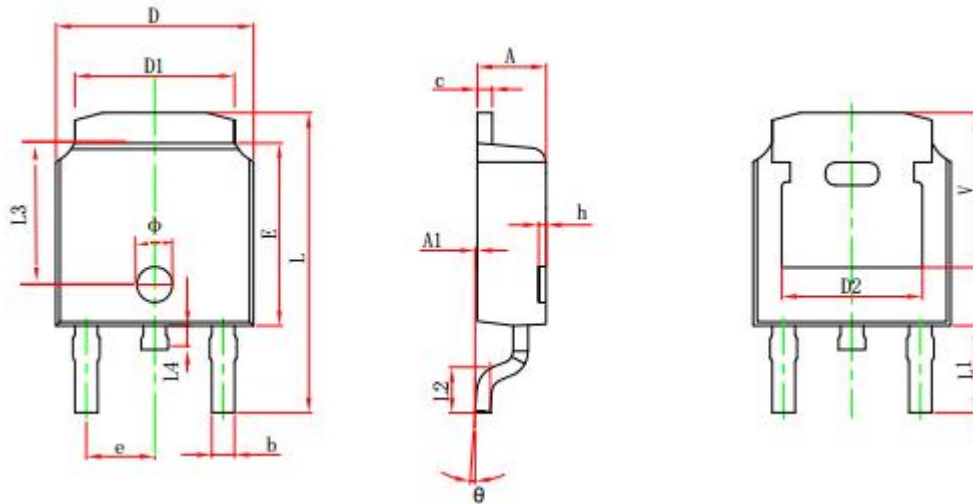
Product ID	PACK	Qty (pcs)
15N10	TO-252	2500

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

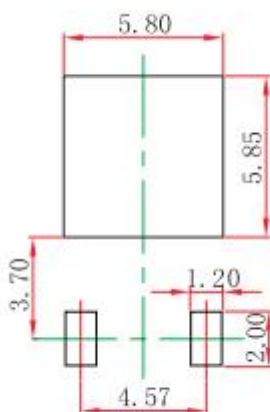
Symbol	Parameter		Value	Unit
V _{DS}	Drain-Source Voltage		100	V
V _{GS}	Gate-Source Voltage		±20	V
I _D	Continuous Drain Current(T _C =25℃,T _J =150℃)		14.7	A
	Continuous Drain Current(T _C =70℃,T _J =150℃)		13.6	A
I _{DM}	Pulsed Drain Current		59	A
P _D	Power Dissipation	T _C =25℃	34.7	W
		T _C =70℃	22.2	W
T _j	Junction Temperature		-55 to 150	℃
T _{stg}	Storage Temperature			
R _{θJA}	Thermal Resistance From Junction To Ambient		62.5	℃/W
R _{θJC}	Thermal Resistance From Junction To Case		3.6	℃/W

**15N10*****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	100			V
Drain-Source diode forward Voltage	V _{SD}	V _{GS} =0V, I _S =8.0A		1.0	1.2	V
Zero gate voltage drain current	I _{DSS}	V _{DS} =80V, V _{GS} =0V			1	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	1.0		3.0	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =1.0A		95	110	mΩ
Forward transconductance	g _{fs}	V _{DS} =40V, I _D =3.5A	5			S
DYNAMIC PARAMETERS						
Reverse Transfer Capacitance	C _{RSS}	V _{DS} =15V, V _{GS} =0V, f=1MHz		23		pF
SWITCHING PARAMETERS						
Total Gate Charge	Q _G	V _{DS} =80V, V _{GS} =10V, I _D =10A		24		nC

**15N10****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.