

### Product Summary

- **60V,50A**

Symbol	Test Condition	Typ.	Max.	Unit
Rds(on)	VGS=10V, ID=9A	14	20	mΩ
	VGS=4.5V, ID=6A	21	30	

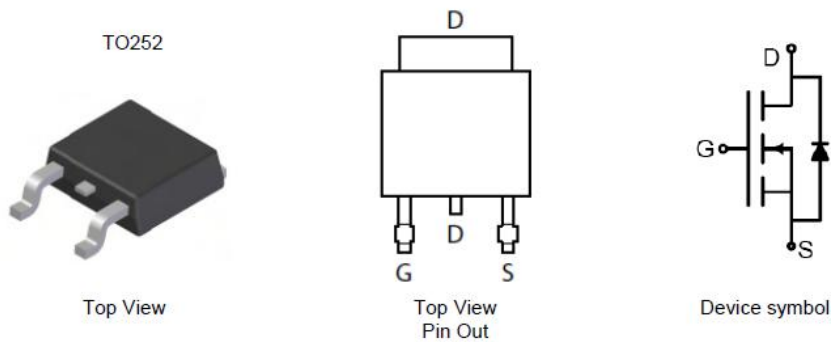
### Applications

- Load Switch
- PWM Application
- Other
- Brushless Motor Driver
- Power management

### Features

- Advanced Trench Technology
- Excellent RDS(ON) and Low Gate Charge
- Lead free product is acquired

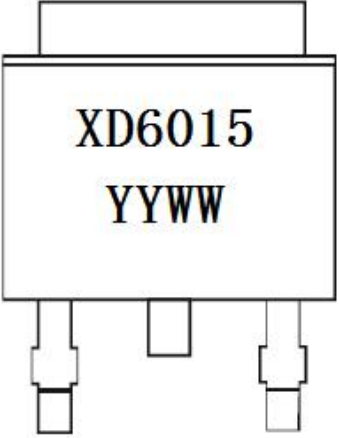
### Mechanical Data



### Ordering Information

Product	Marking	Reel size (inches)	Tape width (mm)	Quantity per reel
LMXD6015	XD6015	13	16	2,500

## Marking Information

	<p>C= Manufacturer's Marking          XD6015 = Product Type Marking Code          YYWW = Date Code Marking          YY = Year (ex: 10 = 2010) WW = Week (01 - 53)</p>
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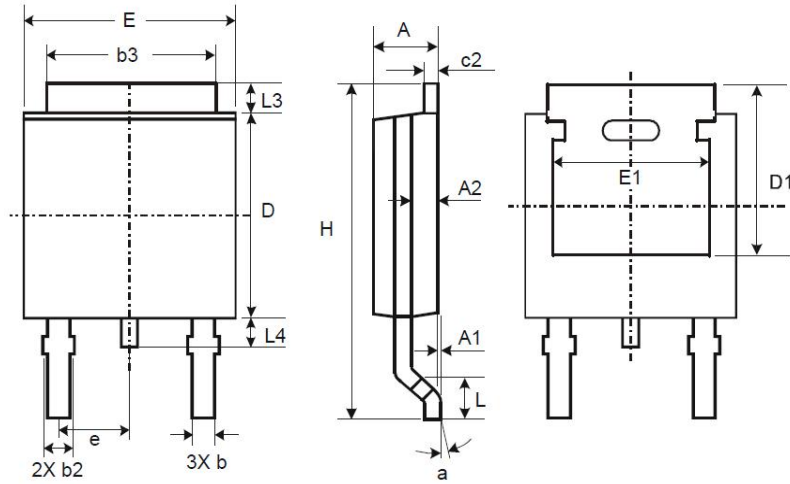
## Key Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Drain to Source Breakdown Voltage	V(BV)dss	V <sub>GS</sub> =0V, I <sub>D</sub> =250uA	60	-	-	V
Continuous Drain Current	I <sub>D</sub>	T <sub>J</sub> =25°C	50			A
Gate-source maximum voltage	V <sub>GS</sub>		±20			V
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> =V <sub>GS</sub> , I <sub>D</sub> =250uA	1.2	1.9	2.5	V
Drain to Source On-state Resistance	Rds(on)	V <sub>GS</sub> =10V, I <sub>D</sub> =9A	-	14	20	mΩ
		V <sub>GS</sub> =4.5V, I <sub>D</sub> =6A	-	21	30	
Diode Forward Voltage	V <sub>SD</sub>	I <sub>D</sub> =9A, V <sub>GS</sub> =0V,	-	0.85	1.2	V
Drain to Source leakage current	I <sub>DSS</sub>	V <sub>DS</sub> =60V, V <sub>GS</sub> =0V T <sub>J</sub> =25°C	-	-	1	uA
		V <sub>DS</sub> =48V, V <sub>GS</sub> =0V T <sub>J</sub> =25°C	-	-	0.8	
Gate to source leakage current1	I <sub>GSS</sub>	V <sub>GS</sub> =±20V	-	-	±100	nA
Junction Temperature	T <sub>J</sub>		-55~150			°C
Storage Temperature	T <sub>STG</sub>		-55~150			°C

### Notes:

1. Pulse test: Pulse Width≤300us, Duty cycle ≤2%.
2. Rds(on) calculated by TO-252 Package Type.

## Package Outline Dimensions



TO252			
Dim	Min	Max	Typ
<b>A</b>	2.19	2.39	2.29
<b>A1</b>	0.00	0.13	0.08
<b>A2</b>	0.97	1.17	1.07
<b>b</b>	0.64	0.88	0.783
<b>b2</b>	0.76	1.14	0.95
<b>b3</b>	5.21	5.46	5.33
<b>c2</b>	0.45	0.58	0.531
<b>D</b>	6.00	6.20	6.10
<b>D1</b>	5.21	-	-
<b>e</b>	-	-	2.286
<b>E</b>	6.45	6.70	6.58
<b>E1</b>	4.32	-	-
<b>H</b>	9.40	10.41	9.91
<b>L</b>	1.40	1.78	1.59
<b>L3</b>	0.88	1.27	1.08
<b>L4</b>	0.64	1.02	0.83