Leiditech

LMXD3005

N-ChannelEnhancement Mode Field Effect Transistor

Product Summary

- **30V,90A**

Symbol	Test Condition	Typ.	Max.	Unit
Rds(on)	VGS=10V, ID=20A	4.1	5.8	mΩ
	VGS=4.5V, ID=15A	5.7	8.0	

Applications

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

Features

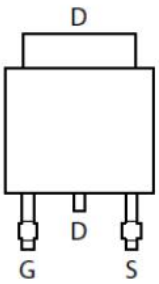
- Advanced Trench Technology
- Excellent RDS(ON) and Low Gate Charge
- Lead free product is acquired

Mechanical Data

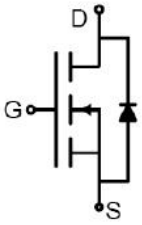
TO252



Top View



Top View
Pin Out



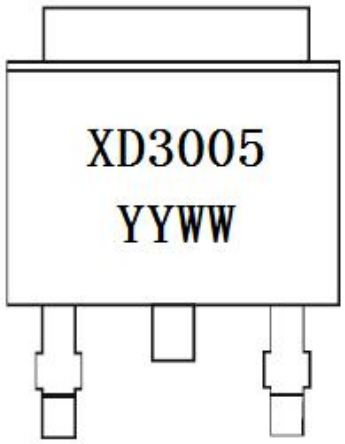
Device symbol

Ordering Information

Product	Marking	Reel size (inches)	Tape width (mm)	Quantity per reel
LMXD3005	XD3005	13	16	2,500

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Marking Information

	C= Manufacturer's Marking XD3005 = Product Type Marking Code YYWW = Date Code Marking YY = Year (ex: 10 = 2010) WW = Week (01 - 53)

Key Electrical Characteristics(Ta=25℃)

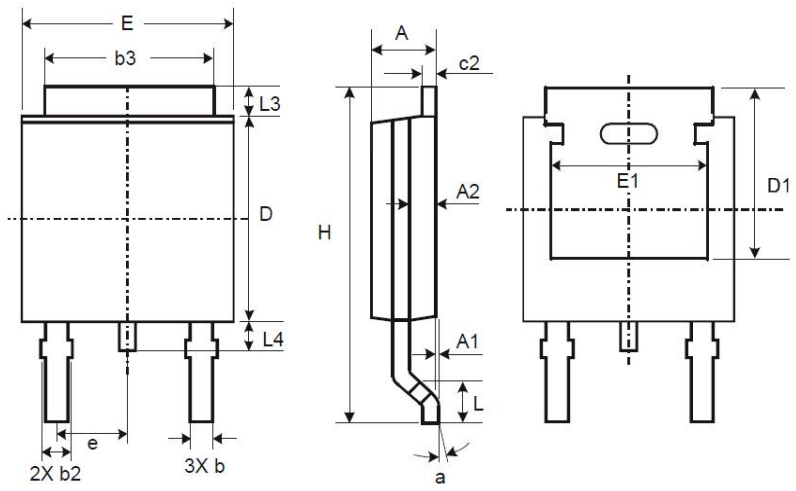
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Drain to Source Breakdown Voltage	V(BV)dss	VGS=0V,ID=250uA	30	32	-	V
Continuous Drain Current	ID	TJ=25℃		90		A
Gate-source maximum voltage	Vgs			±20		V
Gate Threshold Voltage	VGS(th)	VDS=VGS, ID=250uA	1.1	1.5	2.5	V
Drain to Source On-state Resistance	Rds(on)	VGS=10V, ID=20A	-	4.1	5.8	mΩ
		VGS=4.5V, ID=15A	-	5.7	8.0	
Diode Forward Voltage	Vsd	ID=20A, Vgs=0V,	-	0.85	1.2	V
Drain to Source leakage current	IDSS	VDS=30V,VGS=0V TJ=25℃	-	-	1	uA
		VDS=24V,VGS=0V TJ=25℃	-	-	0.8	
Gate to source leakage current1	IGSS	VGS=±20V	-	-	±100	nA
Junction Temperature	TJ	-55~150				℃
Storage Temperature	TSTG	-55~150				℃

Notes:

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

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Package Outline Dimensions



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

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