Description

JMT N-channel Enhancement Mode Power MOSFET

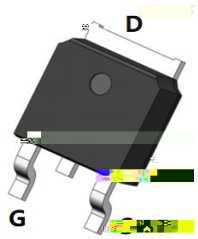
Features

- 30V, 40A
  R
- Lead Free

Applications

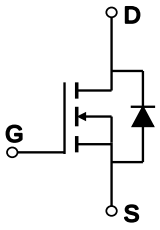
- Load Switch
- PWM Application
- Power Management

100% UIS TESTED!
100% ûVds TESTED!



TO-252-3L(DPAK) Top View

Marking and Pin Assignment



Schematic Diagram

Package Marking and Ordering Information

Device Marking	Device		Package			
JMTK100N03A	JMTK100N03A		TO-252-3L			

Absolute Maximum Ratings (@ T_C = 25℃ unless otherwise specified)

	Parameter		Value	
	Drain-to-Source Voltage		30	
	Gate-to-Source Voltage		–20	
I_D	Continuous Drain Current		40	A
			25	
	Pulsed Drain Current (1)		160	
	Single Pulsed Avalanche Energy (2)		36	
	Power Dissipation		69	
-$	Thermal Resistance, Junction to Ambient(3)		32	℃/W
R -&	Thermal Resistance, Junction to Case		1.8	
T_J, T_{STG}	Junction & Storage Temperature Range		-55 to 150	℃

Electrical Characteristics (T_J = 25℃ unless otherwise specified)

Symbol	Conditions	Min.	Typ.	Max.	Unit
Off Characteristics					
$V_{(BR)DSS}$		30	-	-	V
I_{DSS}		-	-	1.0	μA
I_{GSS}		-	-	–100	nA
$V_{GS(th)}$		1.2	1.6	2.2	V
		-	7.8	10.0	mΩ
		-	11.5	15.0	mΩ
C_{iss}		-			
		-			
		C			

Test Circuit

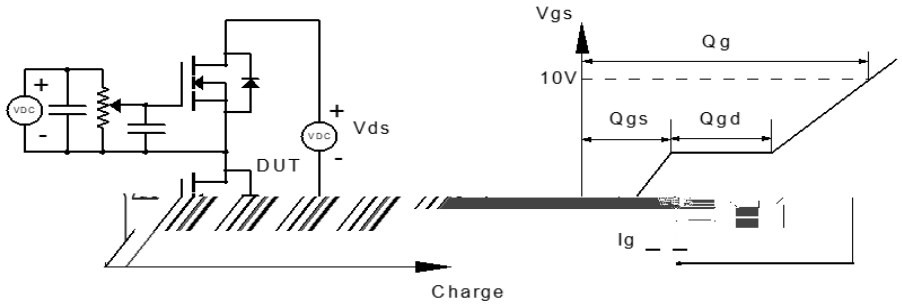


Figure 1: Gate Charge Test Circuit & Waveform

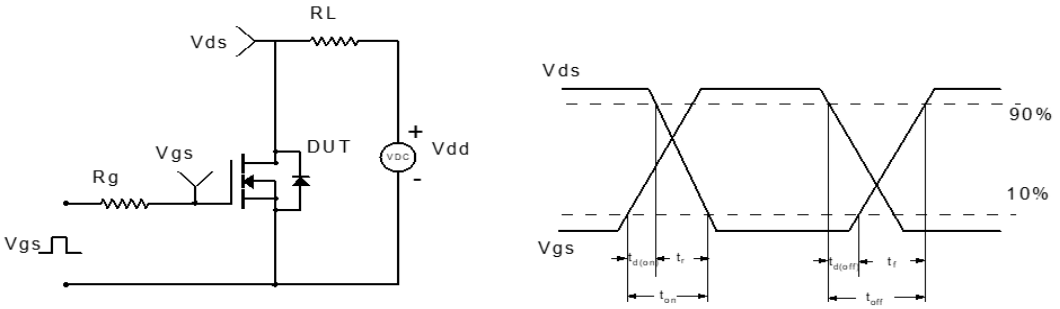


Figure 2: Resistive Switching Test Circuit & Waveform

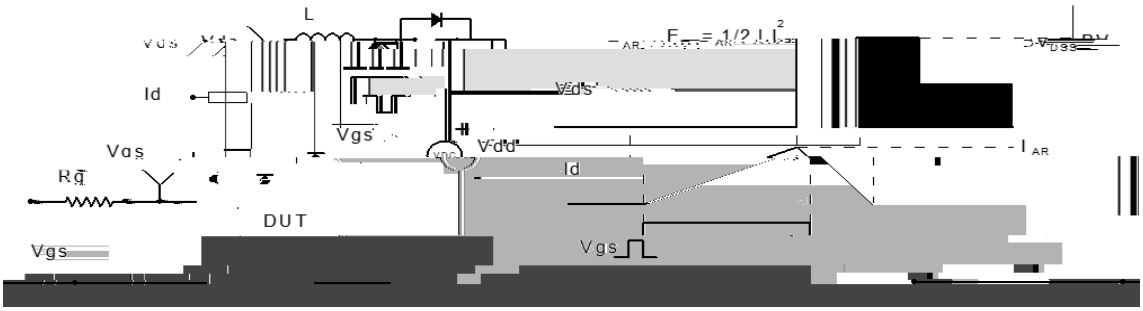


Figure 3: Unclamped Inductive Switching Test Circuit& Waveform

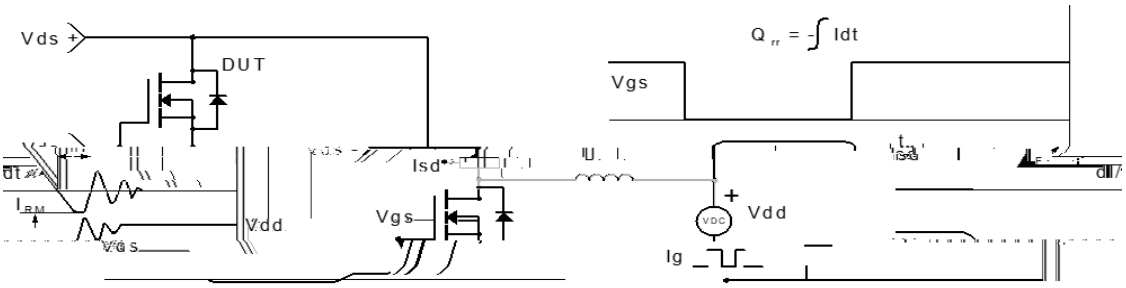


Figure 4: Diode Recovery Test Circuit & Waveform

Package Mechanical Data(TO-252-3L)

Information furnished in this document is believed to be accurate and reliable.
However, Jiangsu JieJie Microelectronics Co.,Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it.
Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.
Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information.

is a registered trademark of Jiangsu JieJie Microelectronics Co.,Ltd.
Copyright '2023 Jiangsu JieJie Microelectronics Co.,Ltd. Printed All rights reserved.