



UNI-SEMICONDUCTOR CO., LTD

宇力半导体有限公司



AP30N06K Data Sheet

V 1.1

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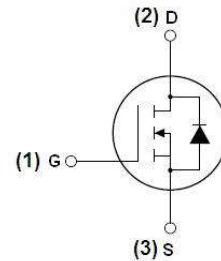
DESCRIPTION

The 30N06 uses advanced trench technology and design to provide excellent $R_{DS(ON)}$ with low gate charge. It can be used in a wide variety of applications.

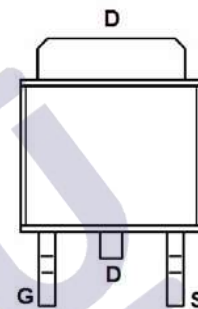
GENERAL FEATURES

- High density cell design for ultra low R_{dson}
- Fully characterized Avalanche voltage and current
- Good stability and uniformity with high E_{AS}
- Excellent package for good heat dissipation
- Special process technology for high ESD capability

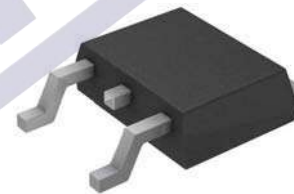
V_{DSS}	$R_{DS(ON)}$ @ 10V (typ)	I_D
60V	26 m Ω	30 A



Schematic diagram



Marking and pin Assignment



TO-252

Application

- Power switching application
- Hard Switched and High Frequency Circuits
- Uninterruptible Power Supply

Absolute Maximum Ratings (TA=25°C unless otherwise noted)

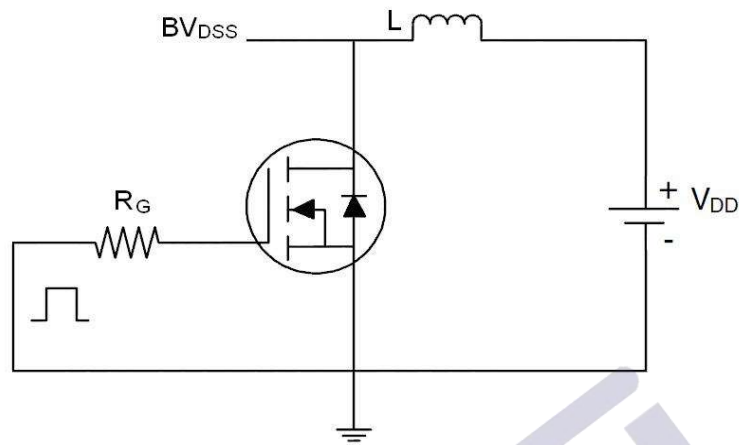
Parameter	Symbol	Limit	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	30	A
Drain Current-Continuous($T_C=100^\circ\text{C}$)	$I_D(100^\circ\text{C})$	17	A
Pulsed Drain Current	I_{DM}	75	A
Maximum Power Dissipation	P_D	50	W
Derating factor		0.33	W/°C
Single pulse avalanche energy (Note 5)	E_{AS}	110	mJ
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 To 175	°C

Thermal Characteristic

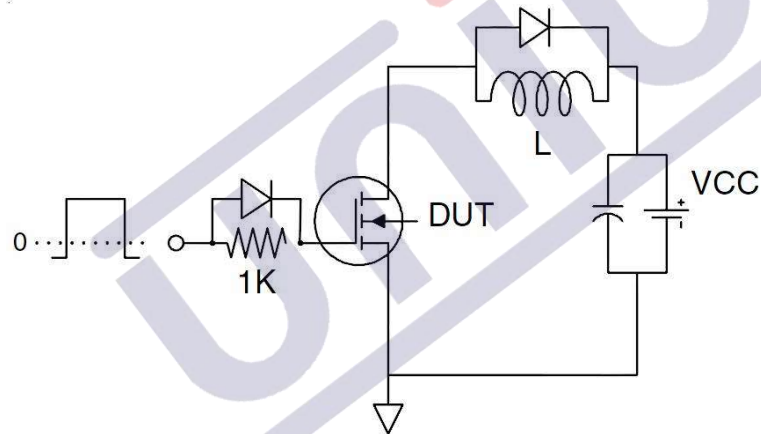
Thermal Resistance, Junction-to-Case(Note 2)	$R_{\theta JC}$	3.0	°C/W
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Test circuit

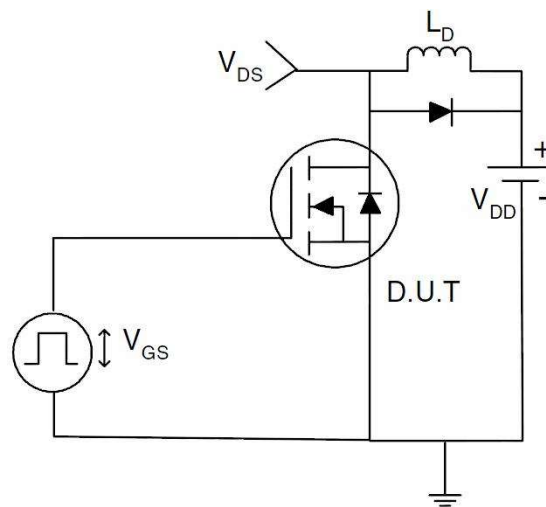
1) E_{AS} test Circuits



2) Gate charge test Circuit:



3) Switch Time Test Circuit:



1.版本记录

DATE	REV.	DESCRIPTION
2018/04/19	1.0	First Release
2021/11/12	1.1	Layout adjustment

2.免责声明

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