



ZHEJIANG UNIÜ-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



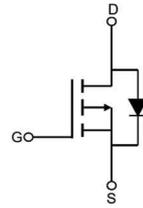
## AP4435C Data Sheet

V 1 . 1

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## Feature

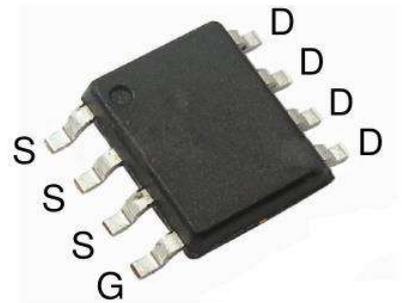
- -30V,-10A  
 $R_{DS(ON)} < 23m\Omega @ V_{GS} = -10V$   
 $R_{DS(ON)} < 34m\Omega @ V_{GS} = -4.5V$
- Trench DMOS Power MOSFET
- Fast Switching
- Exceptional on-resistance and maximum DC current capability



Schematic diagram

## Application

- DC/DC Converter
- Load Switch for Portable Devices
- Battery Switch



SOP-8

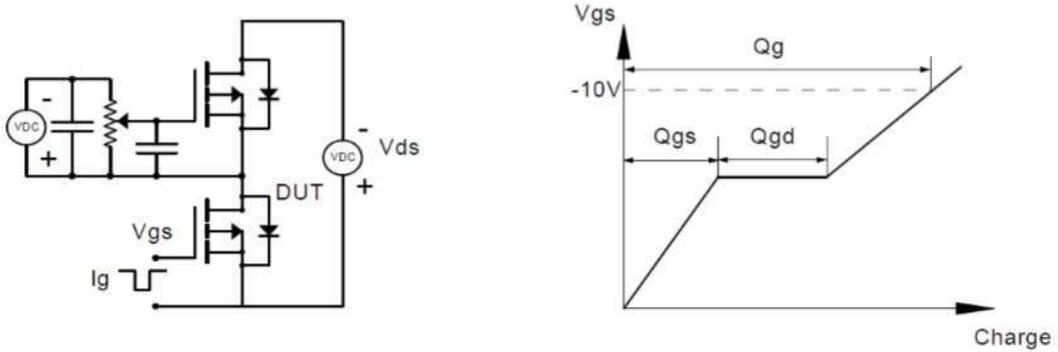
## Package Marking and Ordering Information

Device Marking	Device	Device Package	Reel Size	Tape width	Quantity (PCS)
4435	AP4435C	SOP-8	13 inch	-	4000

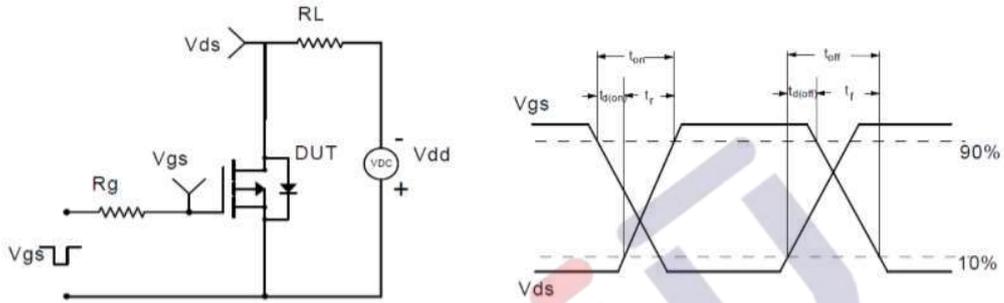
## ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	$V_{DS}$	-30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current ( $T_a = 25^\circ\text{C}$ )	$I_D$	-10	A
Continuous Drain Current ( $T_a = 100^\circ\text{C}$ )	$I_D$	-7	A
Pulsed Drain Current <sup>(1)</sup>	$I_{DM}$	-40	A
Singel Pulsed Avalanche Energy	$E_{AS}$	-	mJ
Power Dissipation	$P_D$	3.7	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	33.8	$^\circ\text{C/W}$
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55~ +150	$^\circ\text{C}$

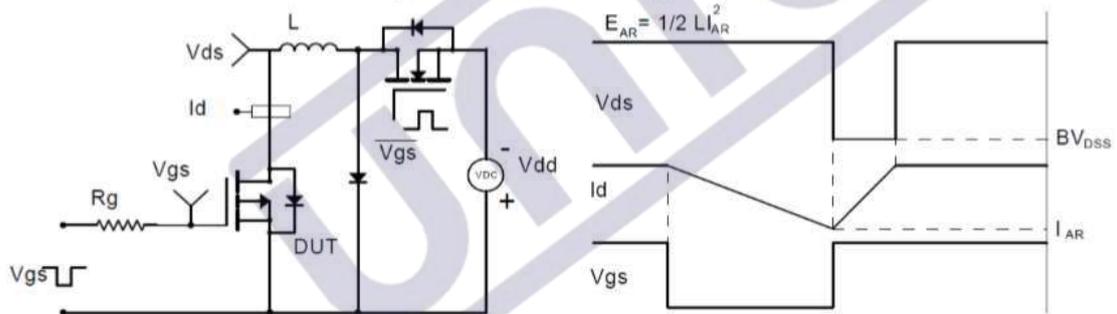
Gate Charge Test Circuit & Waveform



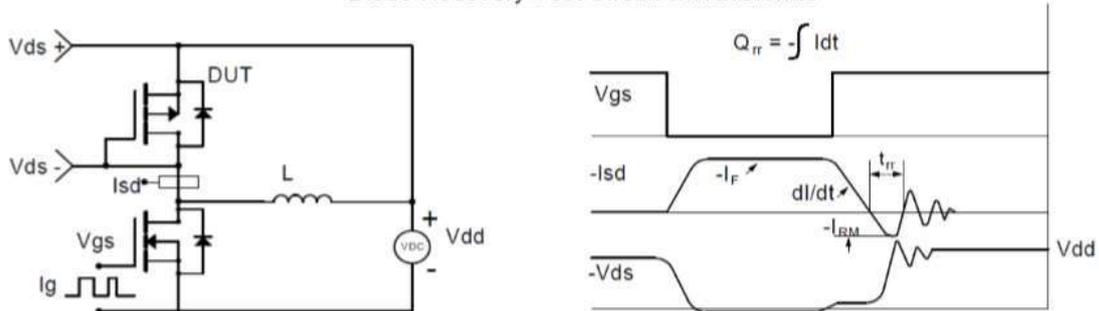
Resistive Switching Test Circuit & Waveforms



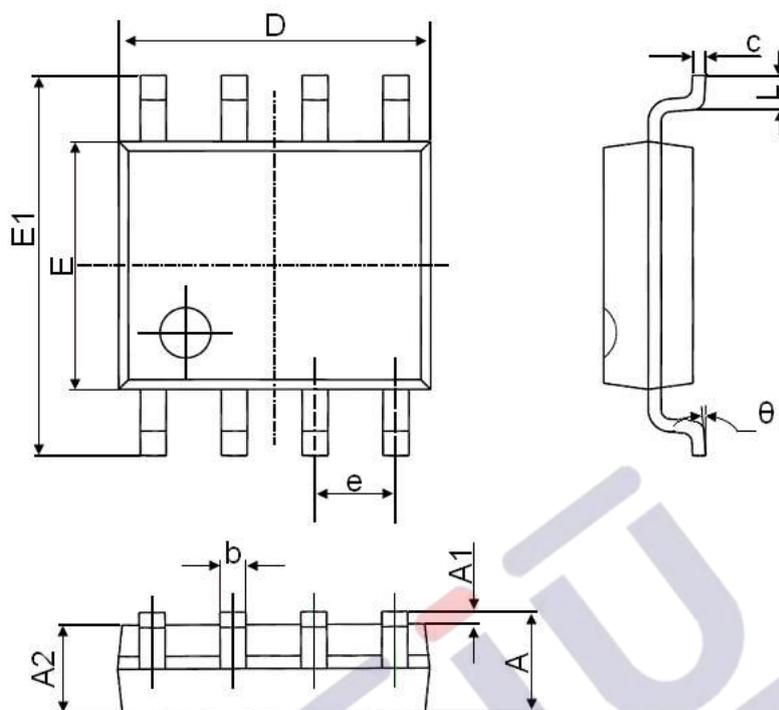
Unclamped Inductive Switching (UIS) Test Circuit & Waveforms



Diode Recovery Test Circuit & Waveforms



## SOP-8 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.006	0.010
D	4.700	5.100	0.185	0.200
E	3.800	4.000	0.150	0.157
E1	5.800	6.200	0.228	0.244
e	1.270(BSC)		0.050(BSC)	
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°

## 1、版本记录

DATE	REV.	DESCRIPTION
2021/04/19	1.0	首次发布
2023/05/21	1.1	优化电路

## 2、免责声明

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## 3、联系我们

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