



ZHEJIANG UNIÜ-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



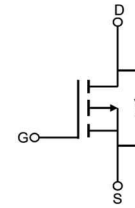
AP80P04K Data Sheet

V 1.1

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Feature

- -40V,-80A
 $R_{DS(ON)} < 7m\Omega @ V_{GS} = -10V$ TYP:5.8 m Ω
 $R_{DS(ON)} < 9m\Omega @ V_{GS} = -4.5V$ TYP:7.5 m Ω
- Advanced Trench Technology
- Lead free product is acquired
- Excellent $R_{DS(ON)}$ and Low Gate Charge



Schematic Diagram

Application

- PWM applications
- Load Switch
- Power management



Marking and pin assignment

Package Marking and Ordering Information

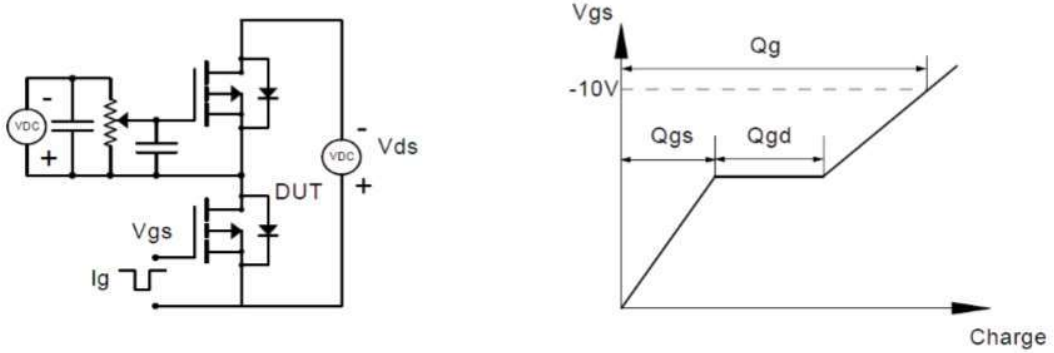
Device Marking	Device	Device Package	Reel Size	Tape width	Quantity (PCS)
80P04K	AP80P04K	TO-252	13 inch	-	2500

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

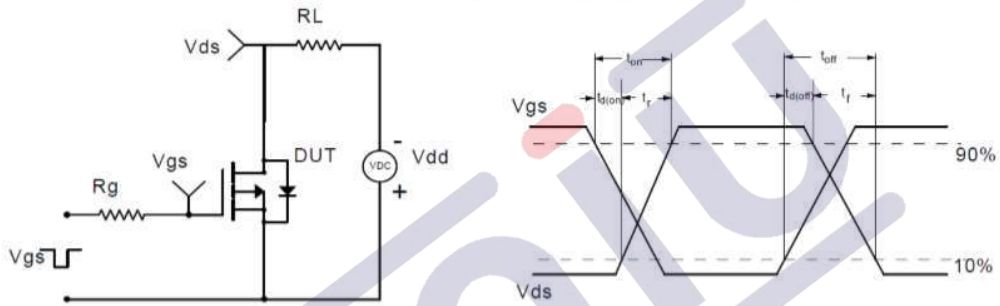
Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-40	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current ($T_a=25^\circ\text{C}$)	I_D	-80	A
Continuous Drain Current ($T_a=100^\circ\text{C}$)	I_D	-50	A
Pulsed Drain Current ⁽¹⁾	I_{DM}	-300	A
Single Pulsed Avalanche Energy ⁽²⁾	E_{AS}	400	mJ
Power Dissipation	P_D	130	W
Thermal Resistance from Junction to Case	$R_{\theta JC}$	0.96	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~ +150	$^\circ\text{C}$

Test Circuit

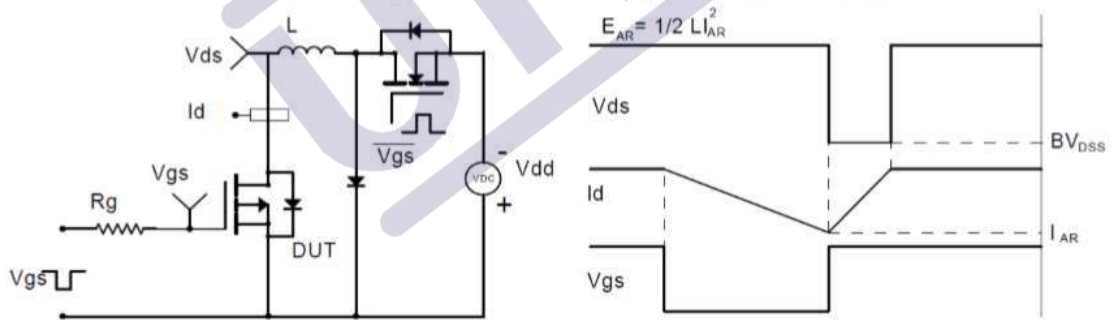
Gate Charge Test Circuit & Waveform



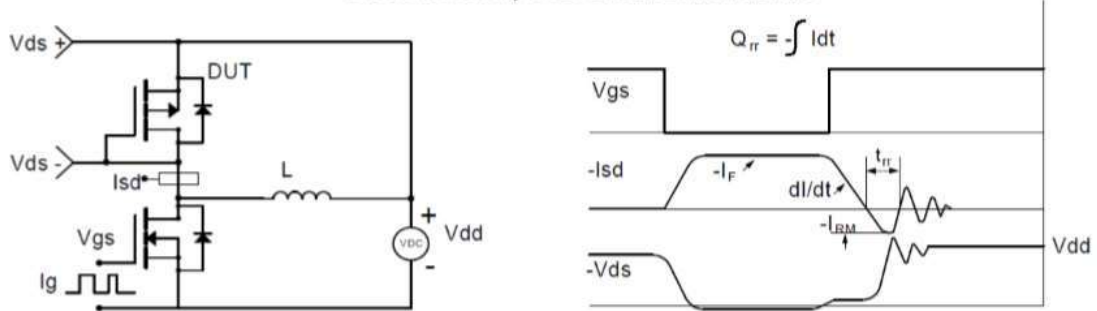
Resistive Switching Test Circuit & Waveforms



Unclamped Inductive Switching (UIS) Test Circuit & Waveforms



Diode Recovery Test Circuit & Waveforms



1.版本记录

DATE	REV.	DESCRIPTION
2018/11/15	1.0	First Release
2020/09/18	1.1	Layout adjustment

2.免责声明

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