



UNI-SEMICONDUCTOR CO., LTD

宇力半导体有限公司



AP130N100D Data Sheet

V 1.1

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Product Summary

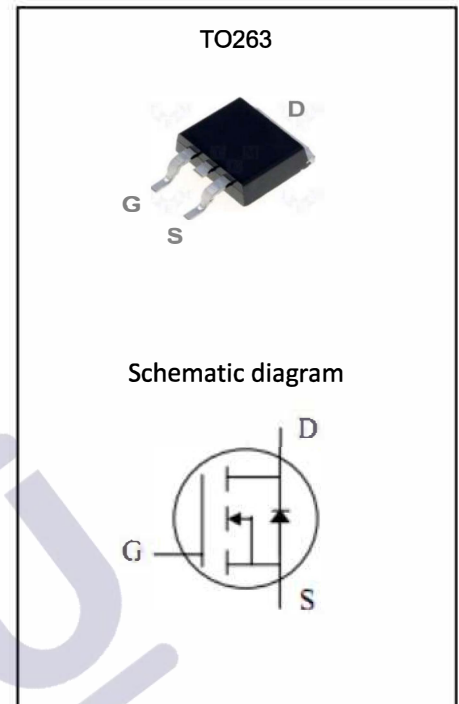
$V_{(BR)DSS}$	$R_{DS(on)MAX}$	I_D
100V	5.5mΩ@10V	130A

Feature

- Trench DMOS Power MOSFET
- Fast Switching
- Exceptional on-resistance and maximum DC current capability

Application

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



Package Marking and Ordering Information

Device Marking	Device	Device Package	Reel Size	Tape width	Quantity
AP130N100D	AP130N100D	TO-263-3L		-	-

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

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	+20/-12	V
Continuous Drain Current	I_D	130	A
Pulsed Drain Current	I_{DM}	280	A
Single pulse avalanche energy	EAS	175	mJ
Power Dissipation	P_D	120	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	62.5	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~ +150	$^\circ\text{C}$

Typical Electrical and Thermal Characteristics

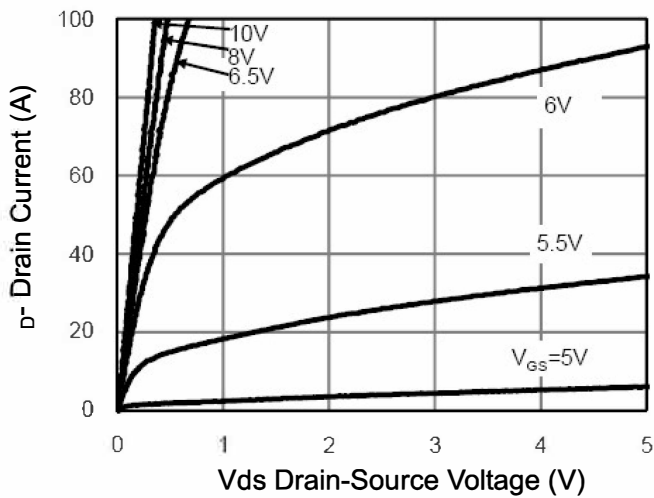


Figure 1 Output Characteristics

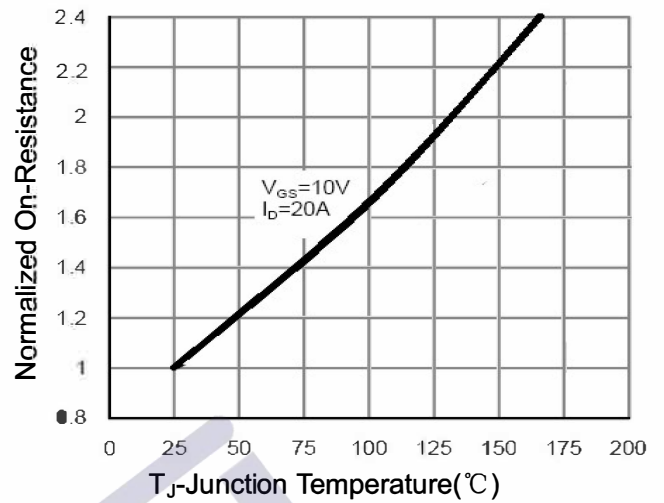


Figure 4 R_{dson} -Junction Temperature

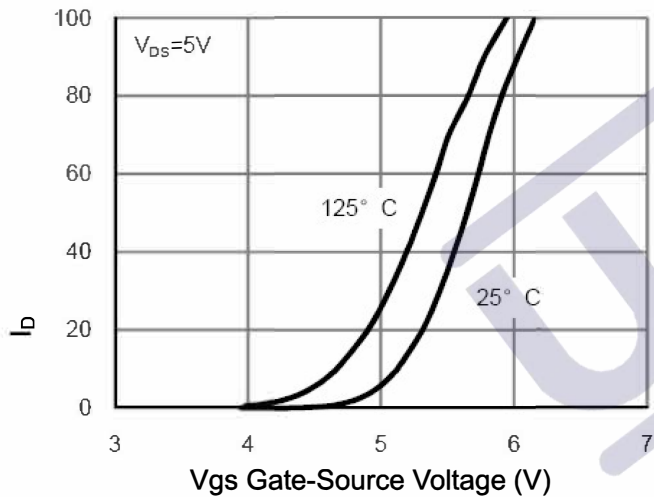


Figure 2 Transfer Characteristics

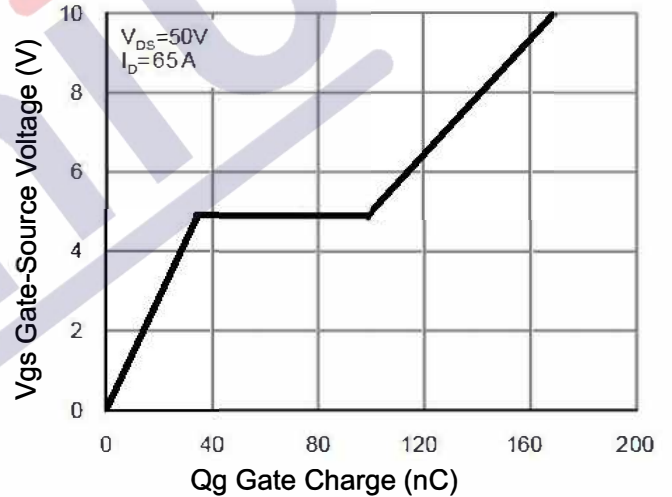


Figure 5 Gate Charge

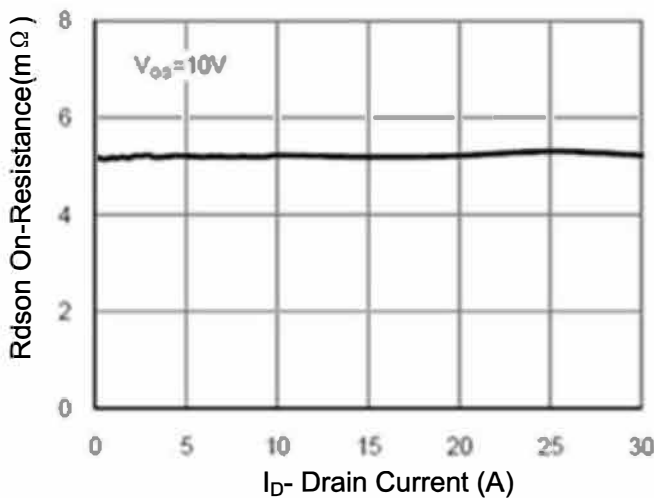


Figure 3 R_{dson} - Drain Current

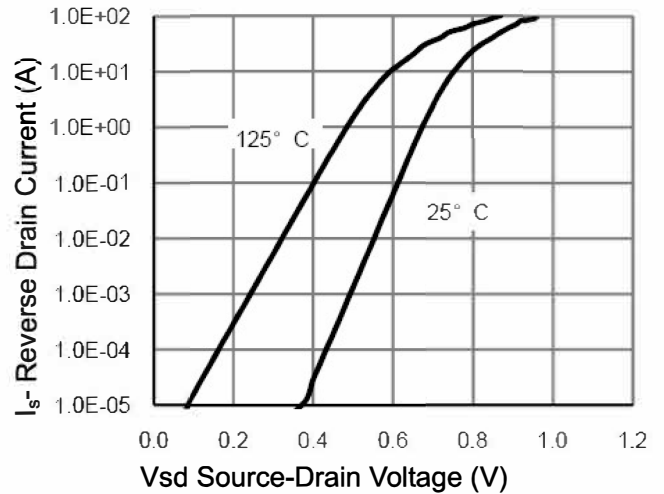


Figure 6 Source- Drain Diode Forward

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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