/ Descriptions

TO-252 N MOS

N-CHANNEL MOSFET in a TO-252 Plastic Package.

/ Features

V_{DS} = 650V I_D = 4A (V_{GS} =±30V)

$R_{DS(ON)}$@10V≤2.5Ω(Typ. 2.15Ω)

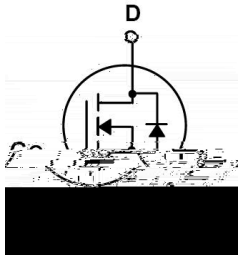
HF Product.

/ Applications

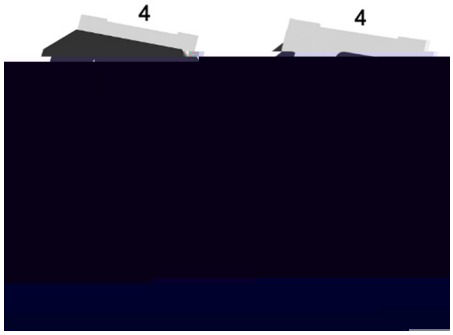
(UPS) /

Switch Mode Power Supply, Uninterruptible Power Supply (UPS), TV Power, Adapter/Charger.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S PIN 4 D

/ Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	650	V
Drain Current	I_D(Tc=25℃)	4.0	A
Drain Current	I_D(Tc=100℃)	2.5	A
Drain Current - Pulsed	I_{DM}	16	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	288	mJ
Continuous Diode Forward Current	I_SS	4	A
Power Dissipation	P_D(Tc=25℃)	83	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	
Junction to Ambient	$R_{\theta JA}$	62	/W
Junction to Case	$R_{\theta JC}$	1.5	/W

Parameter	Symbol	Test Conditions	Min	Typ	%y Unit

S T G

BRD4N65A

/ Electrical Characteristic Curve

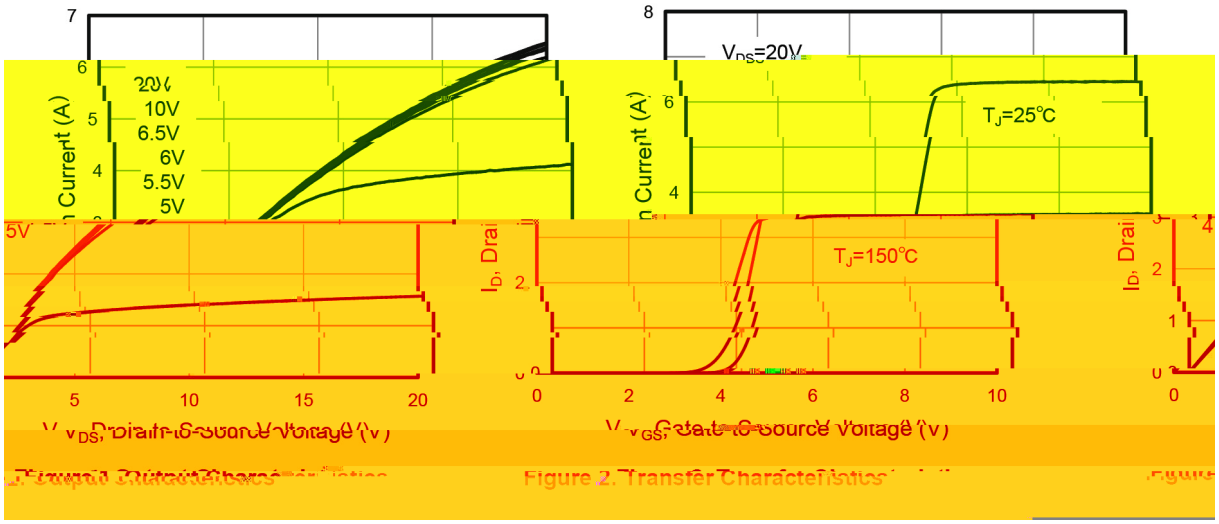
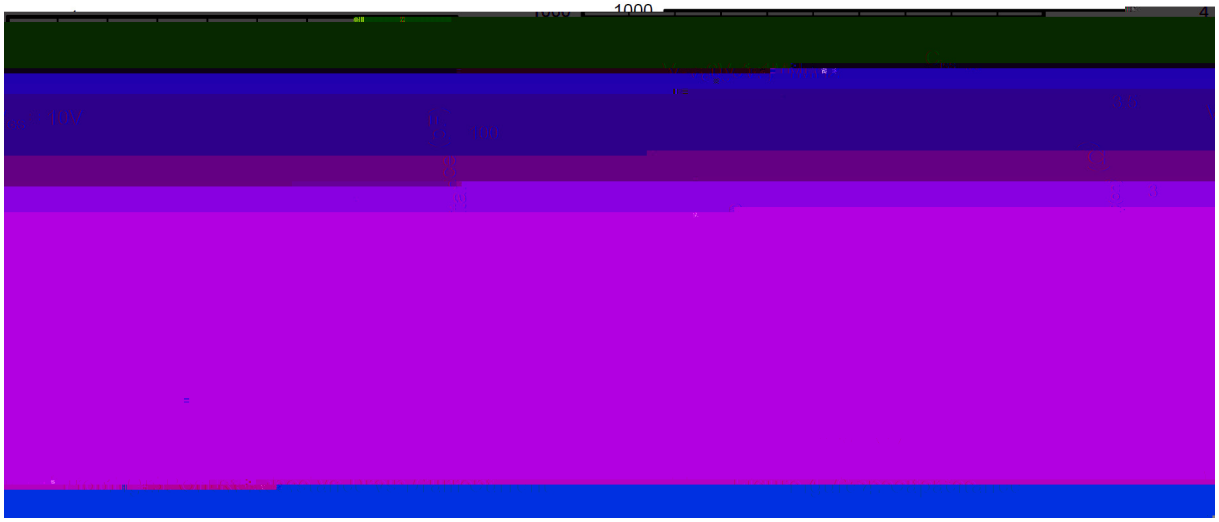
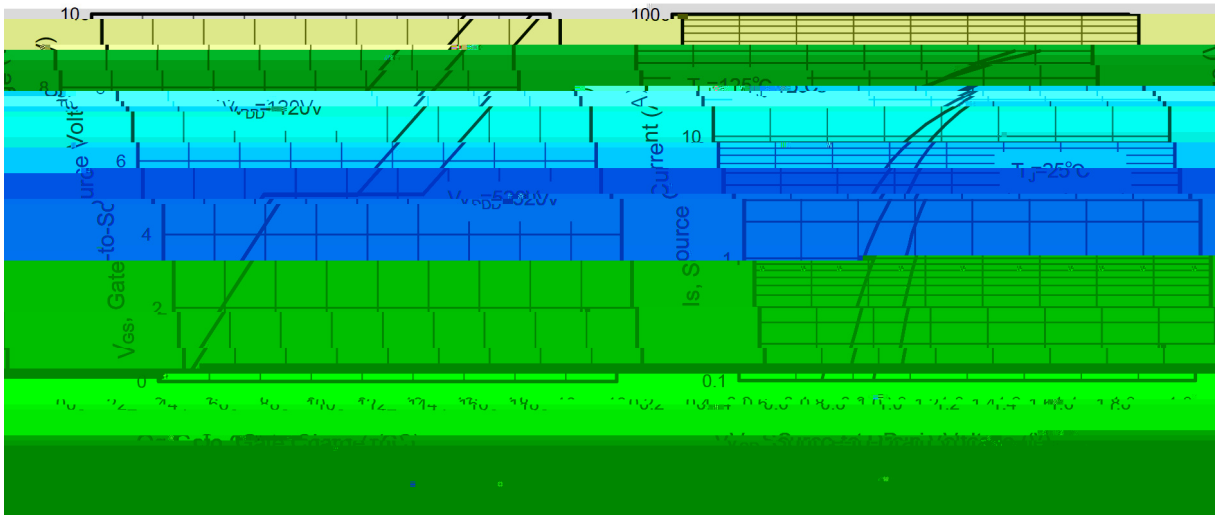


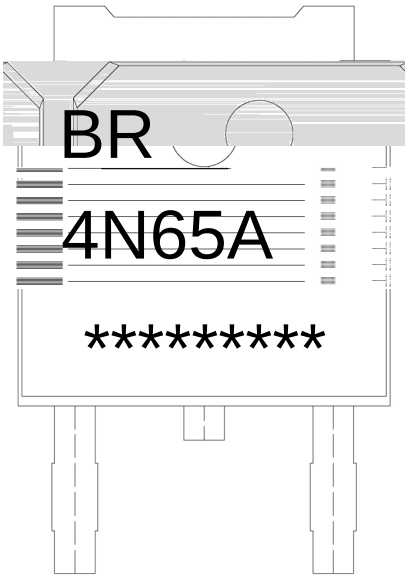
Figure 1. Output Characteristics Figure 2. Transfer Characteristics





BRD4N65A
Rev.A Aug.-2026

/ Marking Instructions



BR

4N65A

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Note:

BR:	Company Code
4N65A:	Product Type Code
*********:	Lot No. Code, code change with Lot No.