

BRC5070N06SHZC

Rev.A Dec.-2024

/ Descriptions

PDFN5² 6 N

N-Channel MOSFET in a PDFN5² 6 Plastic Package .

/ Features

$V_{DS}=60V$ $I_D=67A$

$R_{DS(on)}@10V$ 7m (Type. 5.7m)

$R_{DS(on)}@6V$ 12m (Type. 6.2m)

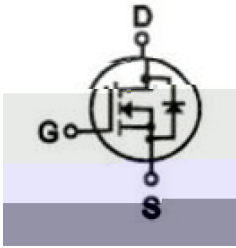
HF Product.

/ Applications

LED

This device is ideal for boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting.

/ Equivalent Circuit



/ Pinning



Pin	极性
1	S
2	S
3	S
4	G
5	D
6	D
7	D
8	D

/ Marking

See Marking Instructions.

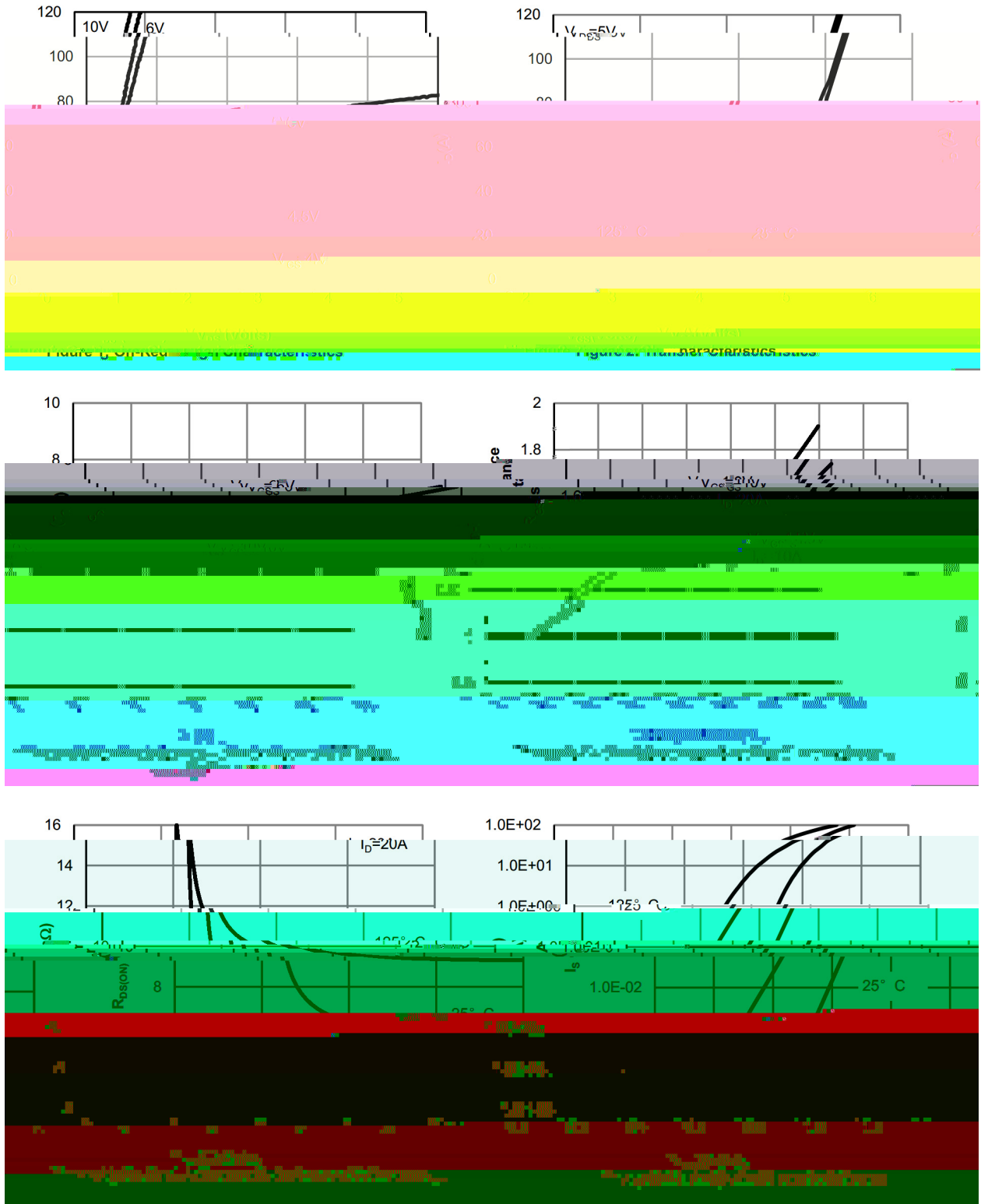
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	60	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	67	A
Pulsed Drain Current		I_{DM}	212	A
Gate-Source Voltage		V_{GS}	20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	720	mJ
Avalanche Current		I_{AS}	41	A
Total Power Dissipation		$P_D(T_C=25^\circ\text{C})$	60	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	Steady-State	R_{JA}	60	/W
Thermal Resistance-Junction to Case	Steady-State	R_{JC}	2.08	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D=250\mu\text{A}, V_{GS}=0\text{V}$	60	70		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60\text{V}, V_{GS}=0\text{V}$			1.0	μA
Gate-Body leakage current	I_{GSS}	$V_{DS}=0\text{V}, V_{GS}=\pm 20\text{V}$			± 100	nA

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=30V$ $R_L=1.5$ $R_{GEN}=3$		21		ns
Turn-On Rise Time	t_r			23		
Turn-Off Delay Time	$t_{d(off)}$			35		
Turn-Off Fall Time	t_f			4.2		

/ Electrical Characteristic Curve



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DATA SHEET

/ Marking Instructions



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070N06SH
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Note
BR Company Code
070N06SH Product Type Code
****: Lot No. Code, code change with Lot No

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