BRCS022N06SZC-58

Rev.A Aug.-2025

DATA SHEET

/ Descriptions

PDFN5Ö6 Ṃ Ŀ N ڏ ʆ ῴ Z̠ ˥

N-Channel MOSFET in a PDFN5×6 Plastic Package.

V_{DS}(V)=60V I_D=80A

$R_{DS(ON)}$@10V 2.2m (Typ.2.0m)

$R_{DS(ON)}$@6V 3.2m (Typ.2.5m)

ῃ̣ ғ ᵝ HF Product.

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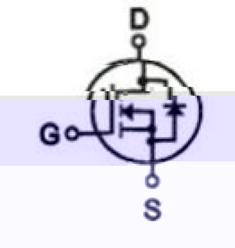
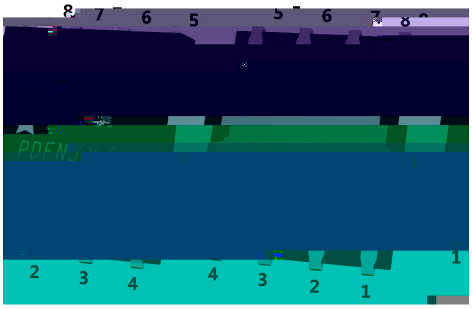
Motor drivers, DC - DC Converter.





PIN1 2 3 S PIN4 G PIN5 6 7 8 D

/ Marking

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See Marking Instructions.

v ˝Ω Parameter	ɣ ᴺ Symbol	˝ΩӪ Rating	ᴅ ɟ Unit
Drain-Source Voltage	V_{DS}	60	V
Continuous Drain Current*	$I_D(T_c=25\ \ )$	80	A
Pulsed Drain Current*,**,***	I_{DM}	209	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25\ \ )$	156	W
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 175	ɫ
Continuous-Source Current	I_S	80	A
Single Pulsed Avalanche Energy V_{DD}=50V , L=0.5mH	E_{AS}	506	mJ
Maximum Junction-to-Ambient*	$R_{\theta JA}$	38	/ W
Maximum Junction-to-Case*	$R_{\theta JC}$	1.1	

Notes

* Surface Mounted on 1 in^2 pad area, t ≤ 10 sec

** Pulse width ≤ 300 s, duty cycle 2 %

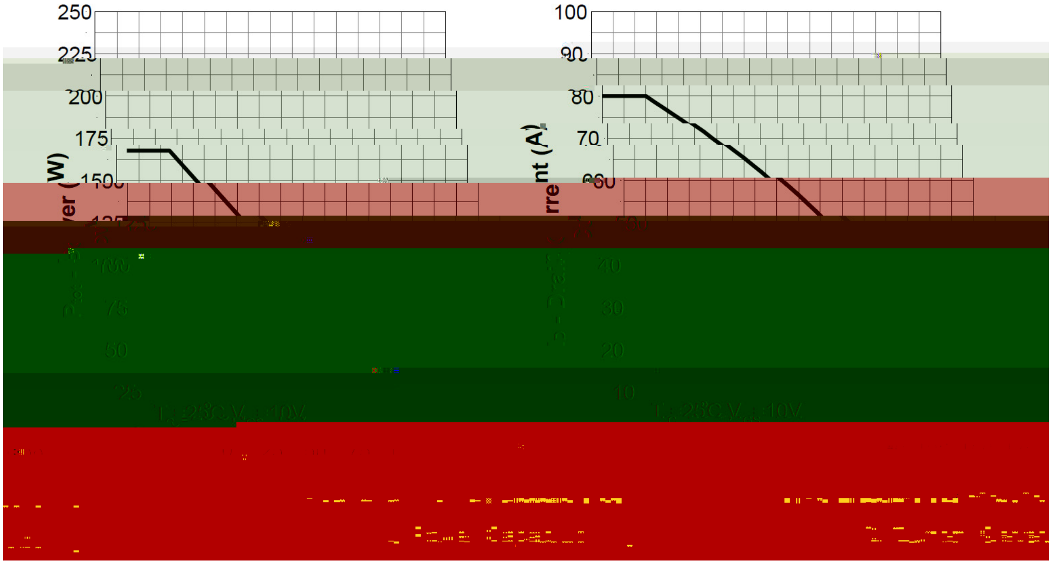
*** Limited by bonding wire

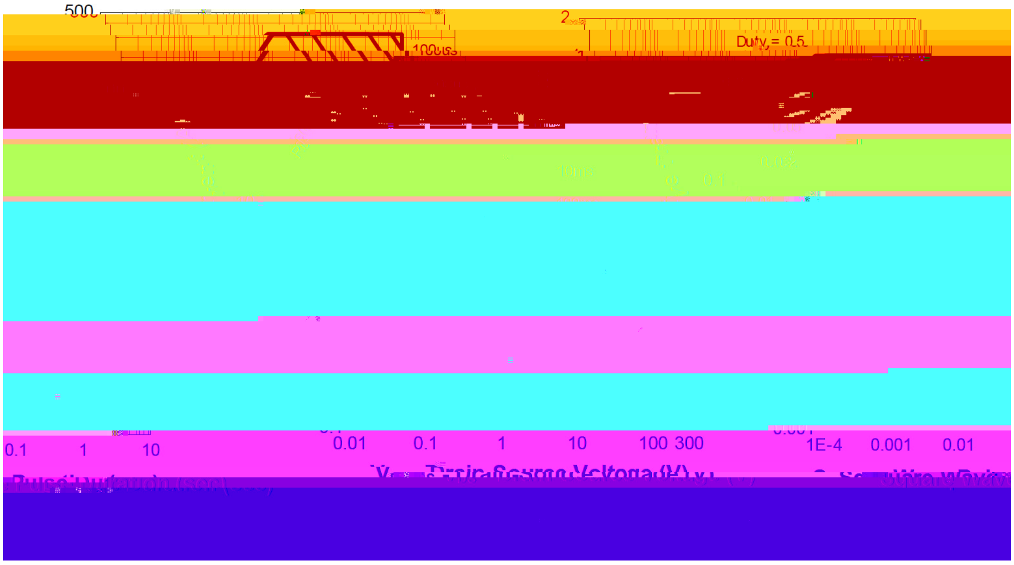
v ˝Ω Parameter	ɣ ᴺ Symbol	╜ ꞉ᛏ ꞇ Test Conditions

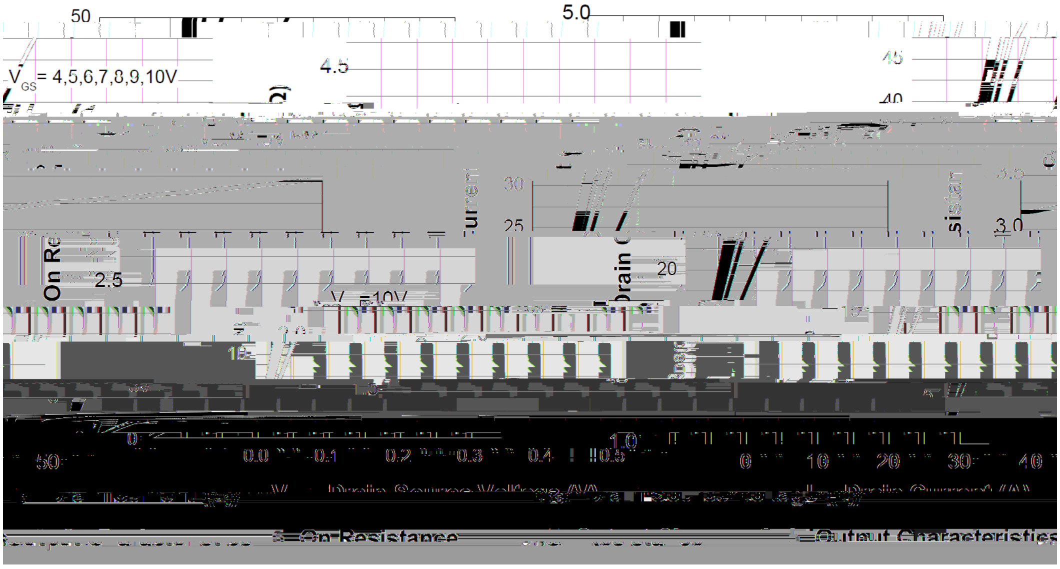
/ Electrical Characteristics(Ta=25)

v ῼ Parameter	ɏ ᴺ Symbol	╜ ⁏ Ţ Test Conditions	ῳ ṇ Ӫ Min	Ɛ ʓ Ӫ Typ	ῳ ̶ Ӫ Max	ᴅ Ʉ Unit
Total Gate Charge	Q_g	V_{GS}=10V V_{DS}=30V I_D=30A		83		nC
Gate Source Charge	Q_{gs}			16		
Gate Drain Charge	Q_{gd}			13		
Turn-On Delay Time	$t_{d(on)}$	V_{GEN}=10V V_{DS}=30V I_{DS}=30A R_G=4.5 R_L=1		22		ns
Turn-On Rise Time	t_r			21		
Turn-Off Delay Time	$t_{d(off)}$			60		
Turn-Off Fall Time	t_f			15		

/ Electrical Characteristic Curve



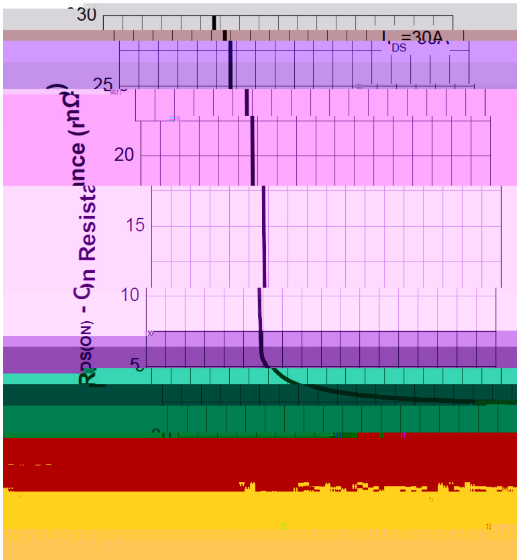


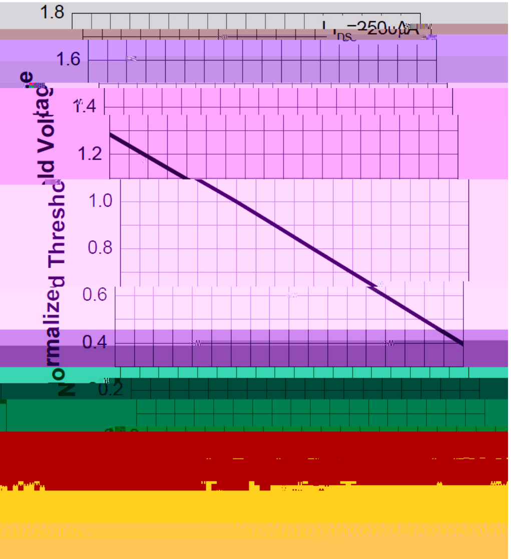


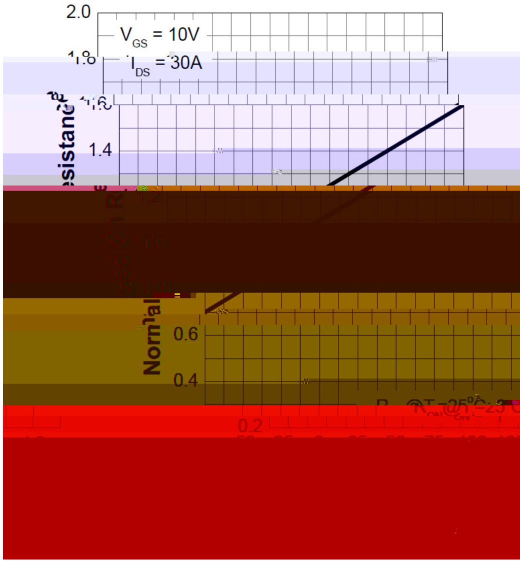
On Resistance

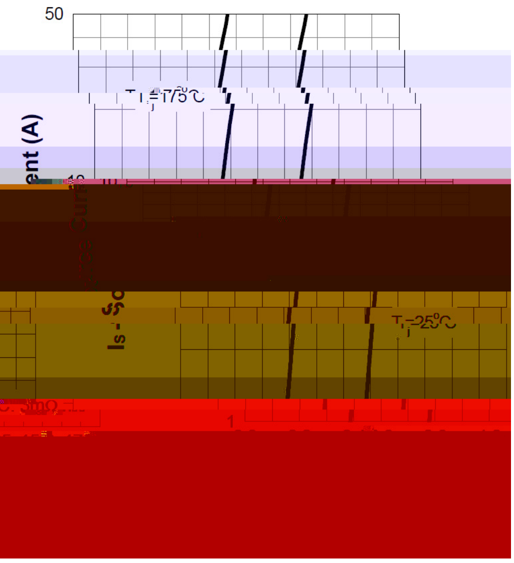
Output Characteristics

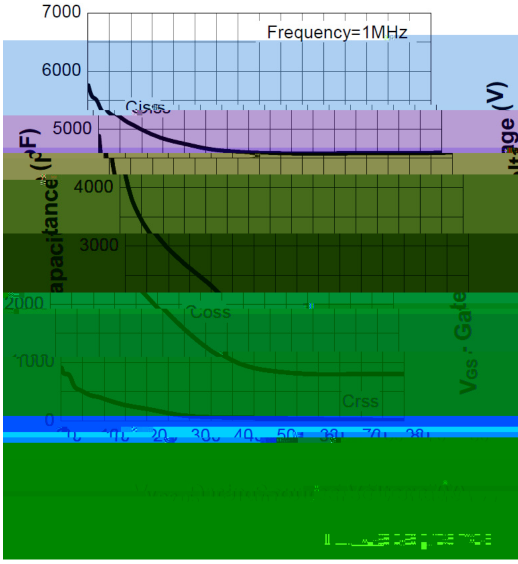
/ Electrical Characteristic Curve

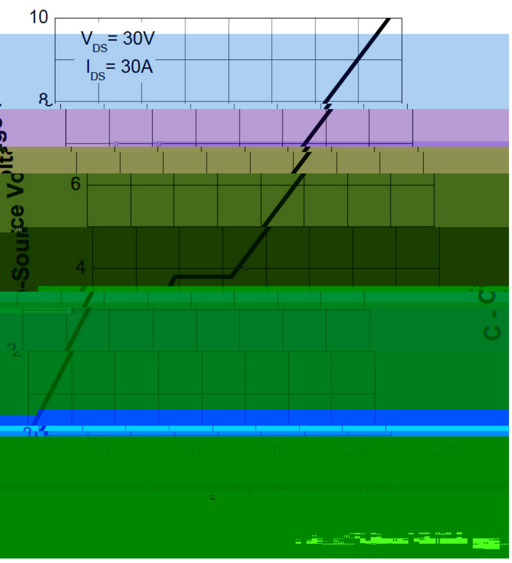




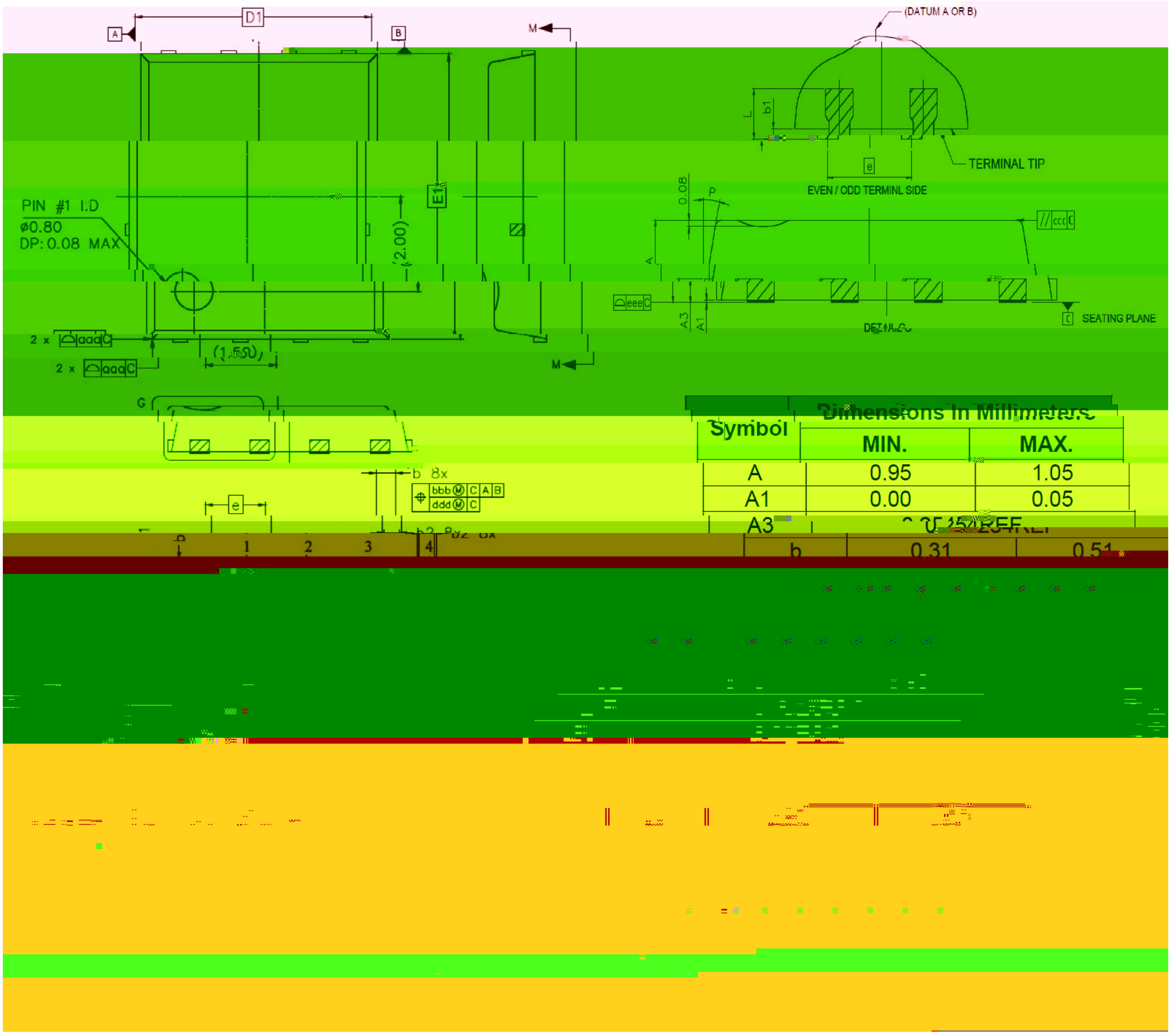






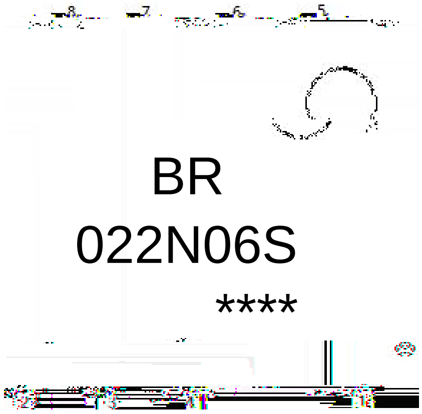


/ Package Dimensions



Symbol	Dimensions In Millimeters	
	MIN.	MAX.
A	0.95	1.05
A1	0.00	0.05
A3	0.254REF	
b	0.31	0.51

/ Marking Instructions



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Note:

BR: Company Code

022N06S: Product Type Code

****: Lot No. Code, code change with Lot No.