

BRCS2300MA

Rev.B Aug.-2023



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

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N- CHANNEL MOSFET in a SOT-23 Plastic Package.

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Low $R_{DS(ON)}$, SOT-23 package, HF Product.

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Battery management, High speed switch, I

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@ f Parameter	... Z Symbol	f > Rating	% y Unit
Drain-Source Voltage	V _{DSS}	20	V
Gate-Source Voltage	V _{GSS}	±10	V
Drain Current – Continuous	I _D	4.5	A
Pulsed Drain Current	I _{DM}	12	A
Power Dissipation	P _D	1.4	W
Storage Temperature Range	T _{stg}	-55 150	

Maximum Junction-to-Ambient t 0 10s

R


Electrical Characteristics(Ta=25 ;)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_g(10V)$	$V_{DS}=10V$ $V_{GS}=10V$ $I_D=4.5A$		12.5		nC
Total Gate Charge	$Q_g(4.5V)$			6		
Gate Source Charge	Q_{gs}			1		
Gate Drain Charge	Q_{gd}			2		
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=10V$ $V_{GS}=10V$ $R_{GEN}=3$ $R_L=1.7$		3		ns
Turn-On Rise Time	t_r			7.5		
Turn-Off Delay Time	$t_{d(off)}$			20		
Turn-Off Fall Time	t_f			6		

Electrical Characteristic Curve

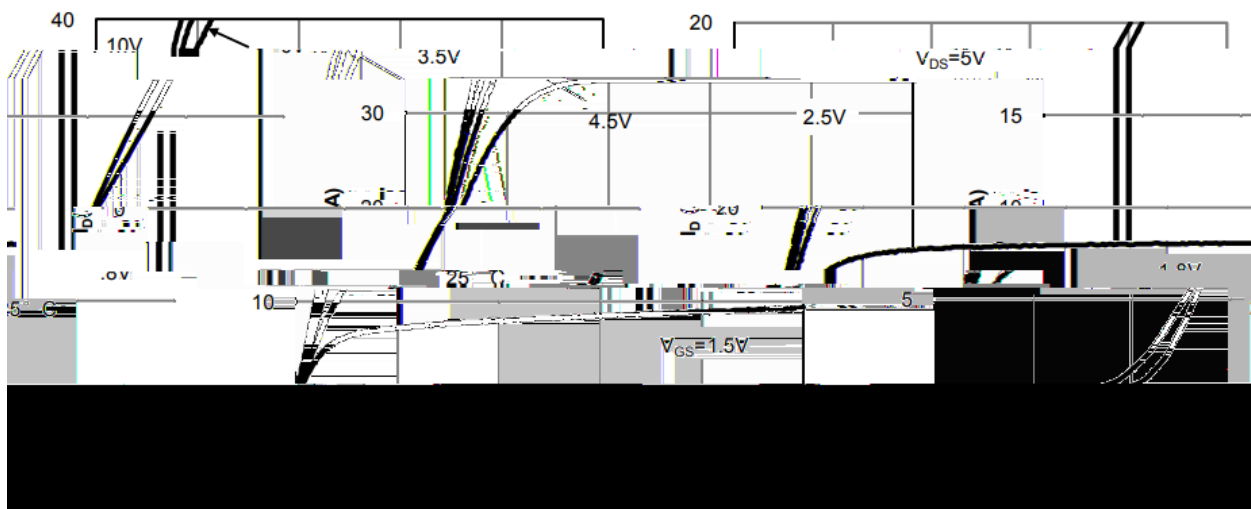
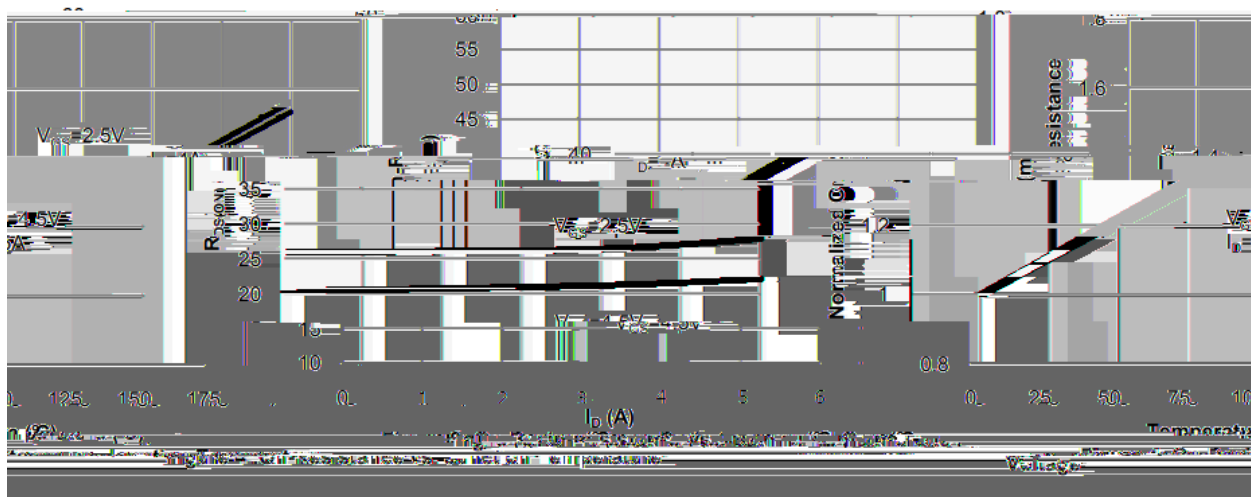
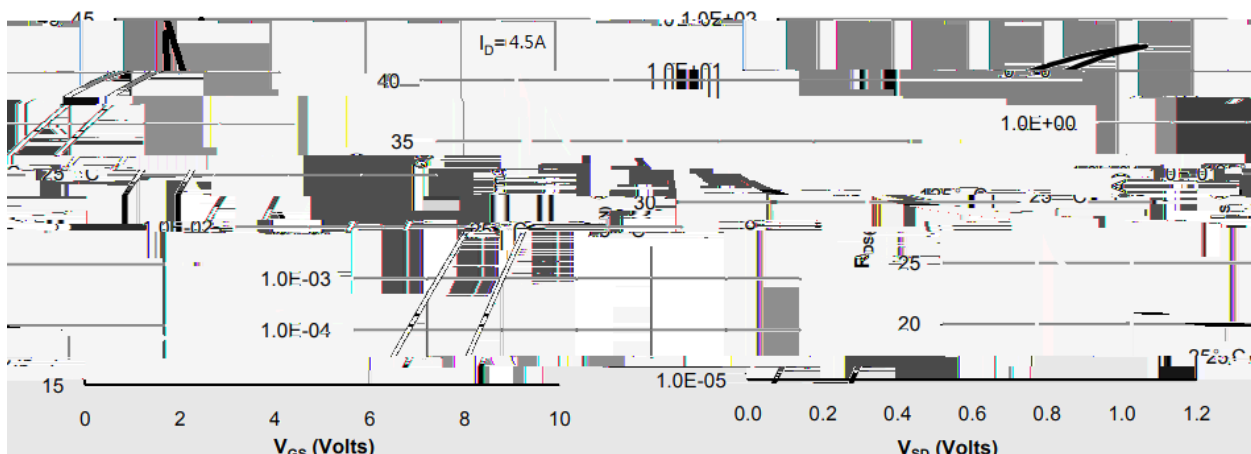


Figure 5: On-Resistance vs. Gate-Source Voltage

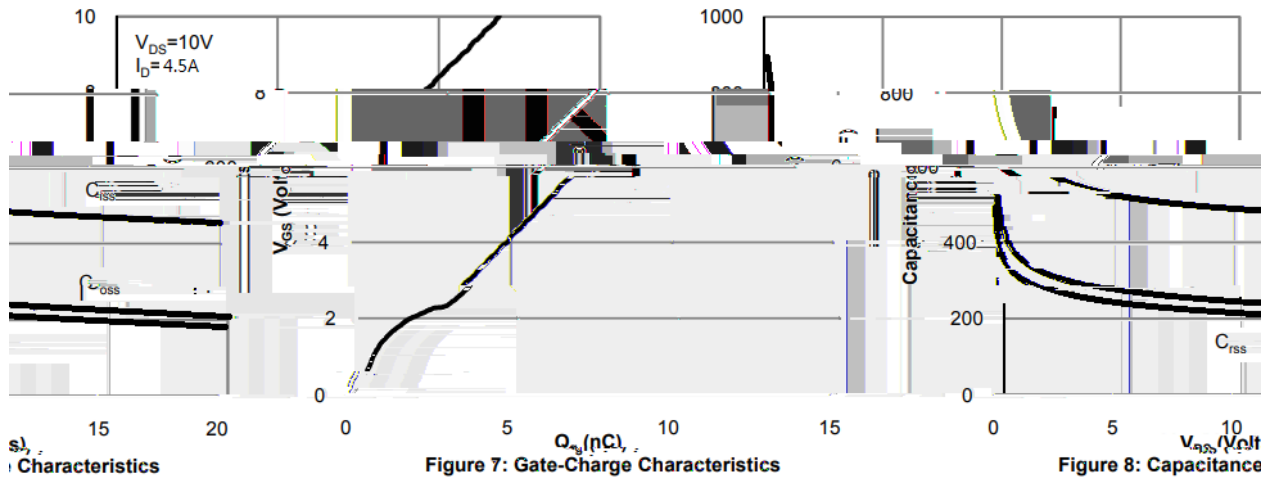
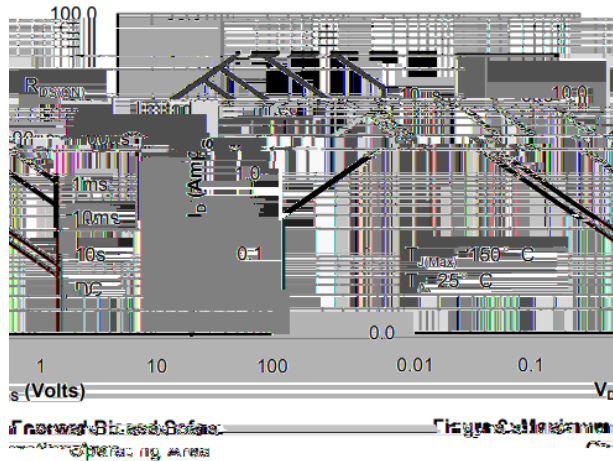
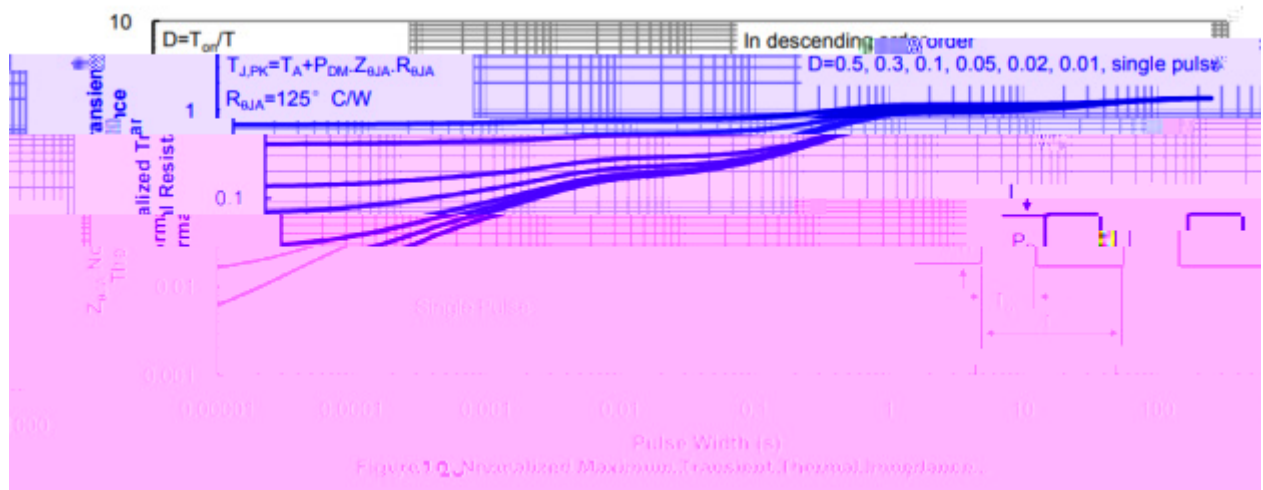
Figure 6: Body Diode Characteristics

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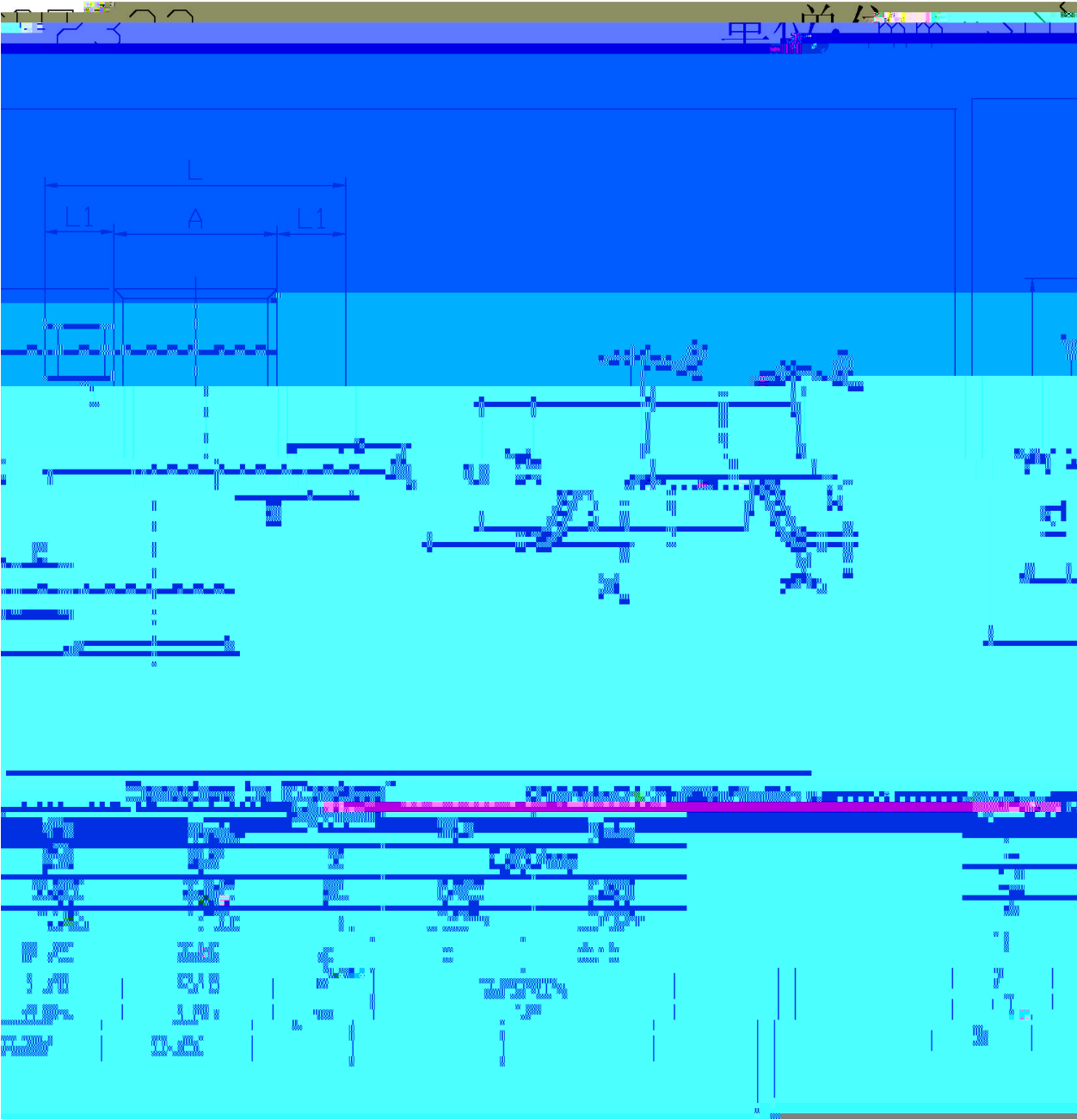
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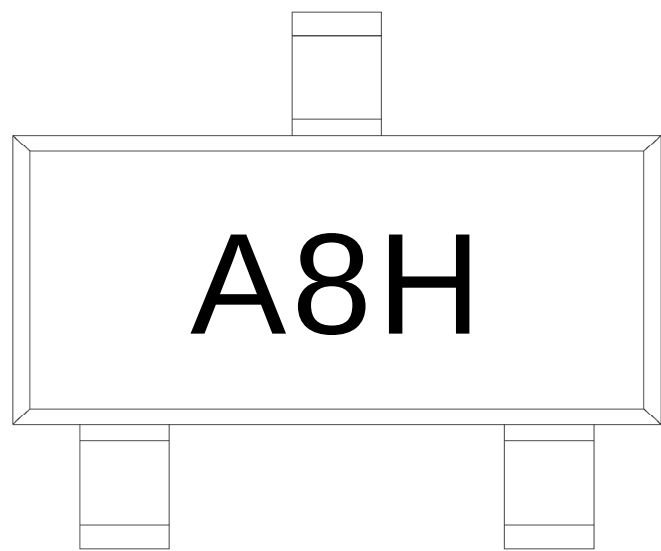
Electrical Characteristic Curve



Ø □ =) ¢ / Package Dimensions



, M y f / Marking Instructions



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A8: ° Z W A

H: , [W A

Note:

A8 y Product Type Code

H: Company Code

