

BRCS2300MA

Rev.B Aug.-2023



DATA SHEET

9 5: .> // x 4 ?ú 3 « | • 'ož

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

8*9 54 - * Š 4 k 9 5: / x k —)í D }ož

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

P ' ò k ä , • ¼ k z ä *) *) ô Eož

Battery management, High speed switch, I

BRCS2300MA

Rev.B Aug.-2023



DATA SHEET

@ 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	

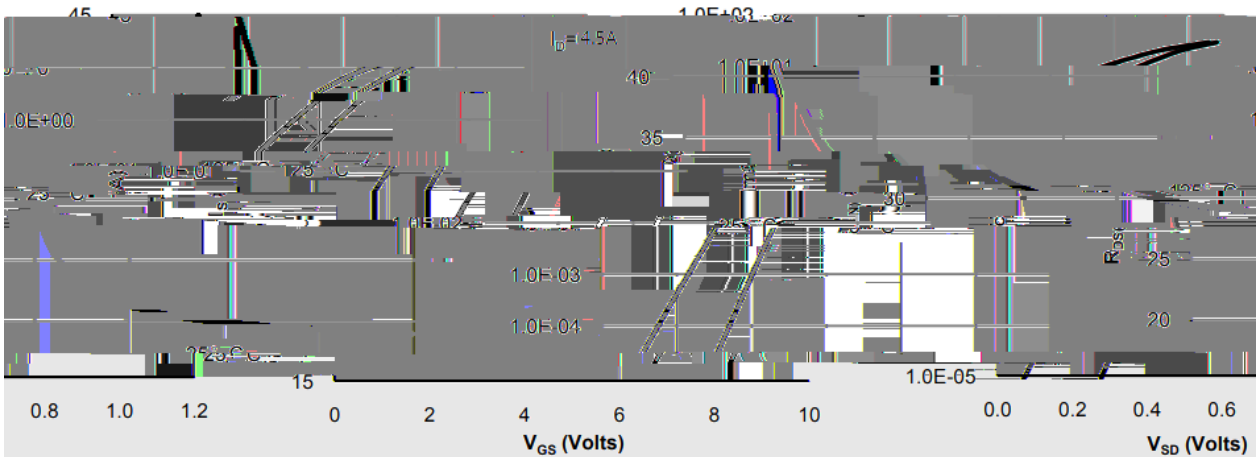
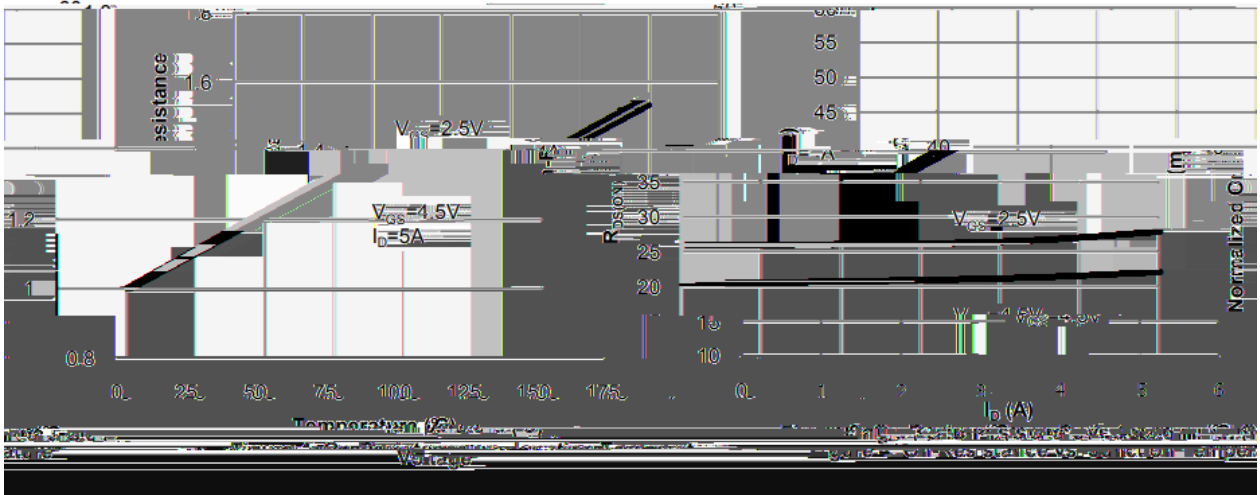
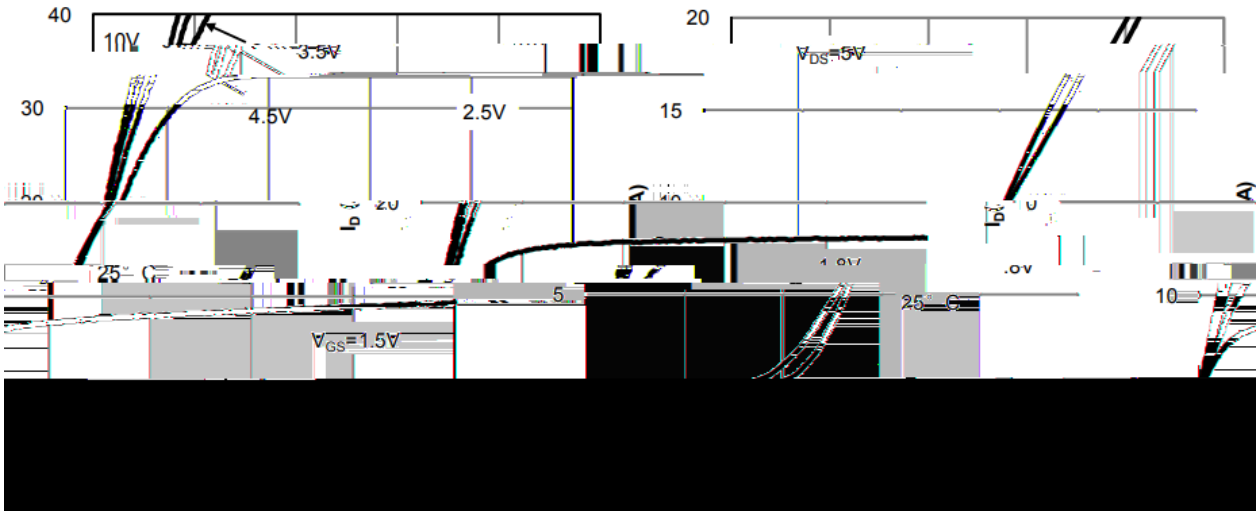
Maximum Junction-to-Ambient t 0 10s

R

Electrical Characteristics(Ta=25 ;)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_g(10V)$	$V_{DS}=10V$ $I_D=4.5A$ $V_{GS}=10V$		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	$t_{d(on)}$	$V_{DS}=10V$ $R_{GEN}=3$ $V_{GS}=10V$ $R_L=1.7$		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

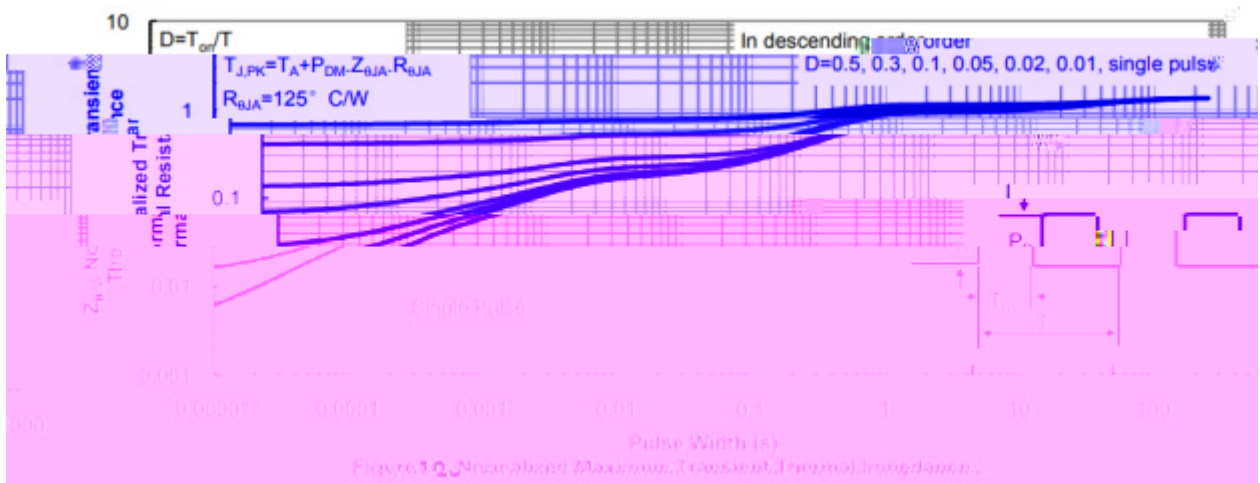
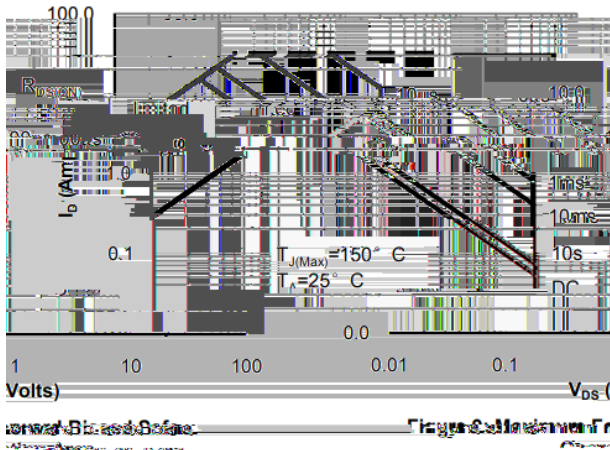
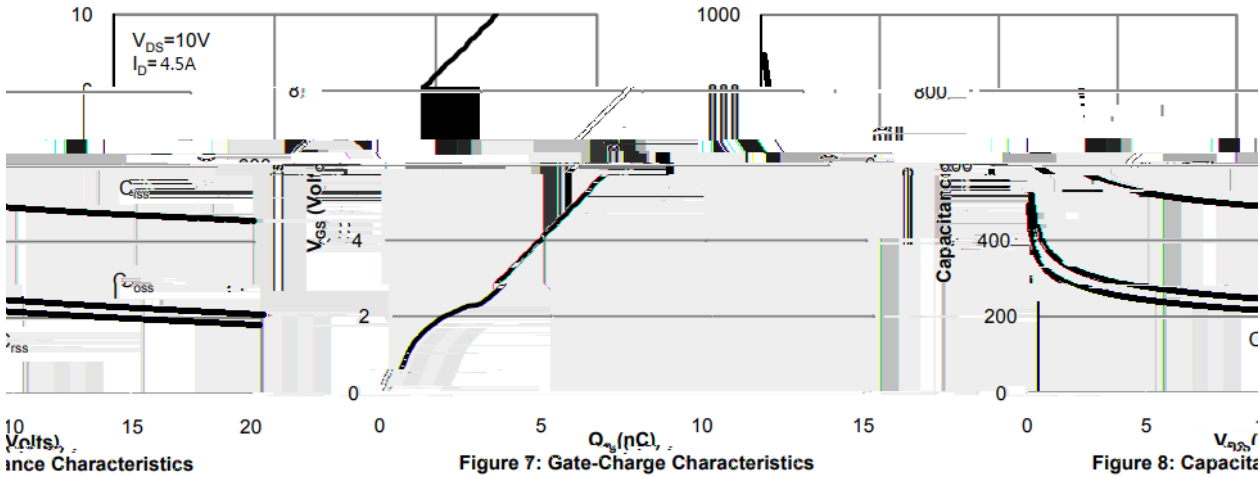


Characteristics

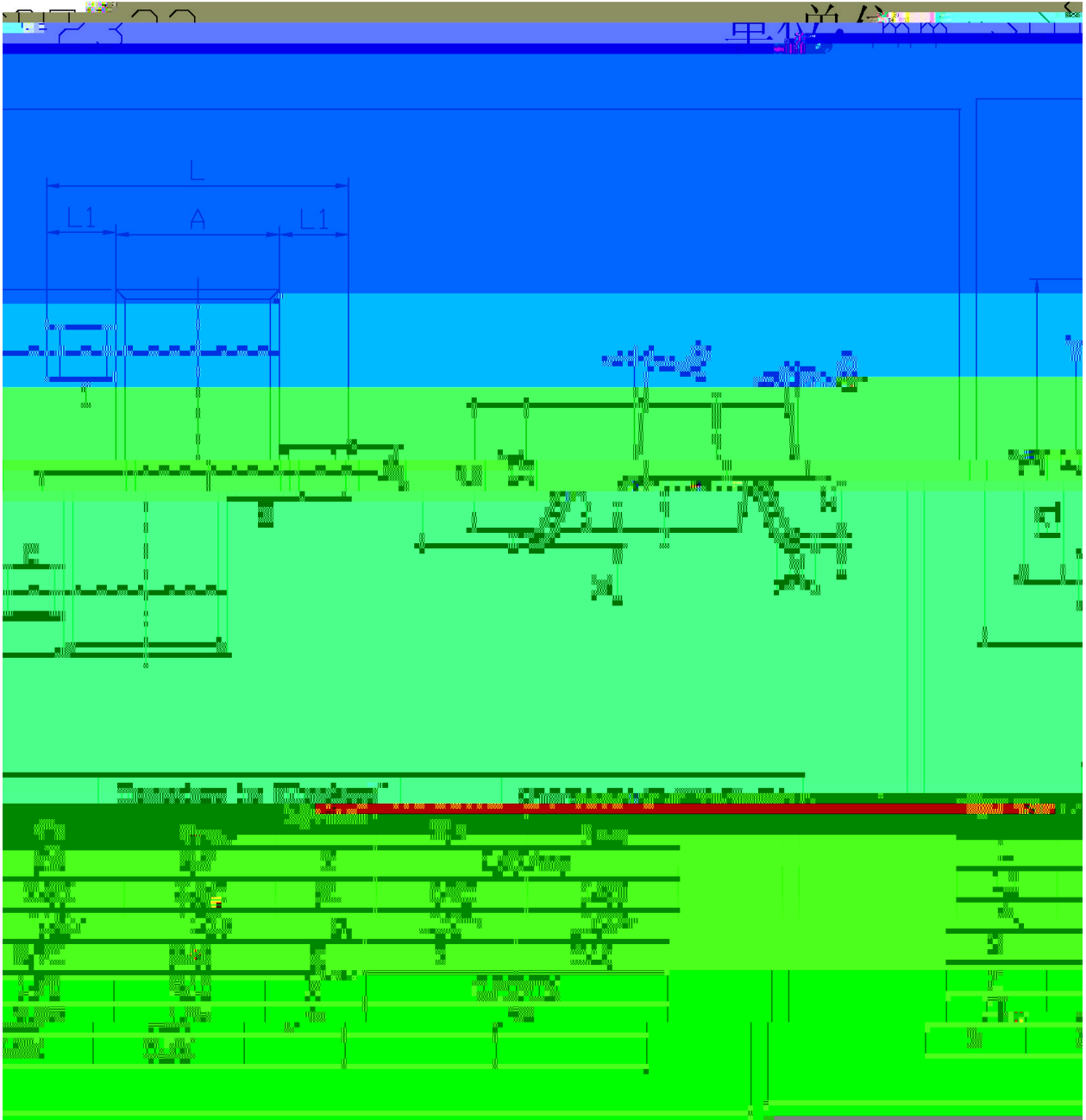
Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body Diode

Electrical Characteristic Curve

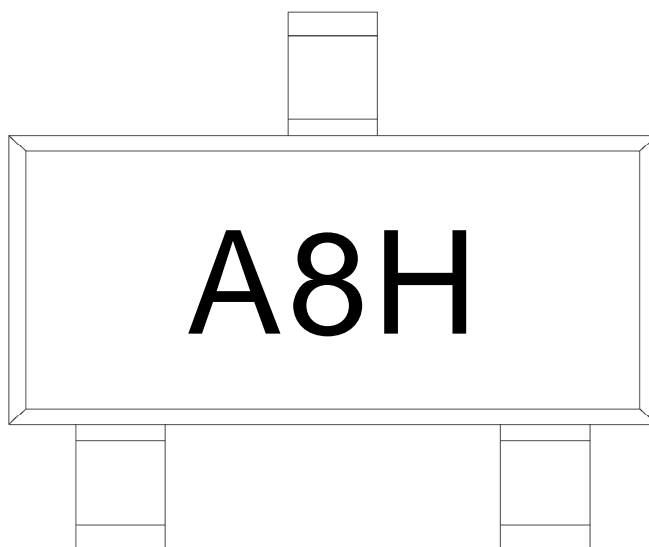


Ø □ =) φ / Package Dimensions





, M y f / Marking Instructions



^a ϕ y

A8: ° Z W A

H: , [W A

Note:

A8 y Product Type Code

H: Company Code

