

BRCS022N06SZC-58

Rev.A Aug.-2025

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Continuous Drain Current*	$I_D(T_c=25^\circ\text{C})$	80	A
Pulsed Drain Current**,**,	I_{DM}	209	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	156	W
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 175	$^\circ\text{C}$
Continuous-Source Current	I_S	80	A
Single Pulsed Avalanche Energy $V_{DD}=50\text{V}, L=0.5\text{mH}$	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 in² pad area, $t \leq 10$ sec

** Pulse width ≤ 300 μs , duty cycle $\leq 2\%$

*** Limited by bonding wire

Parameter

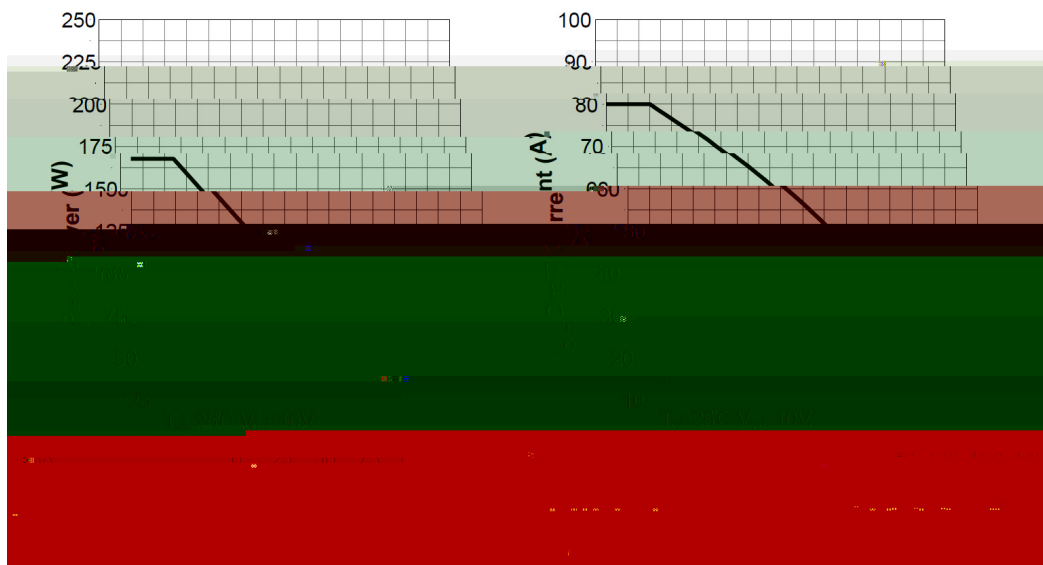
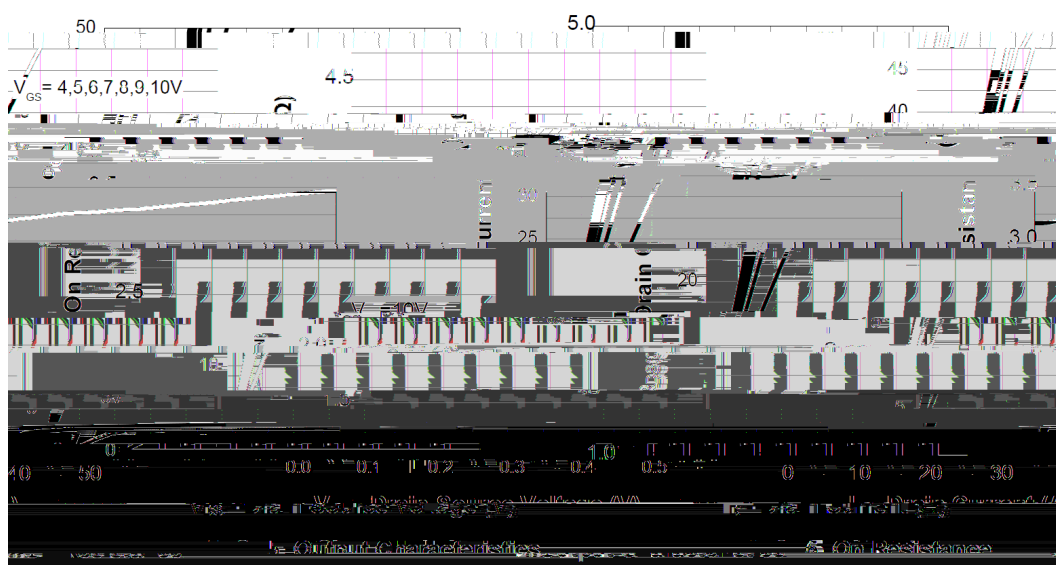
Symbol

Test Conditions

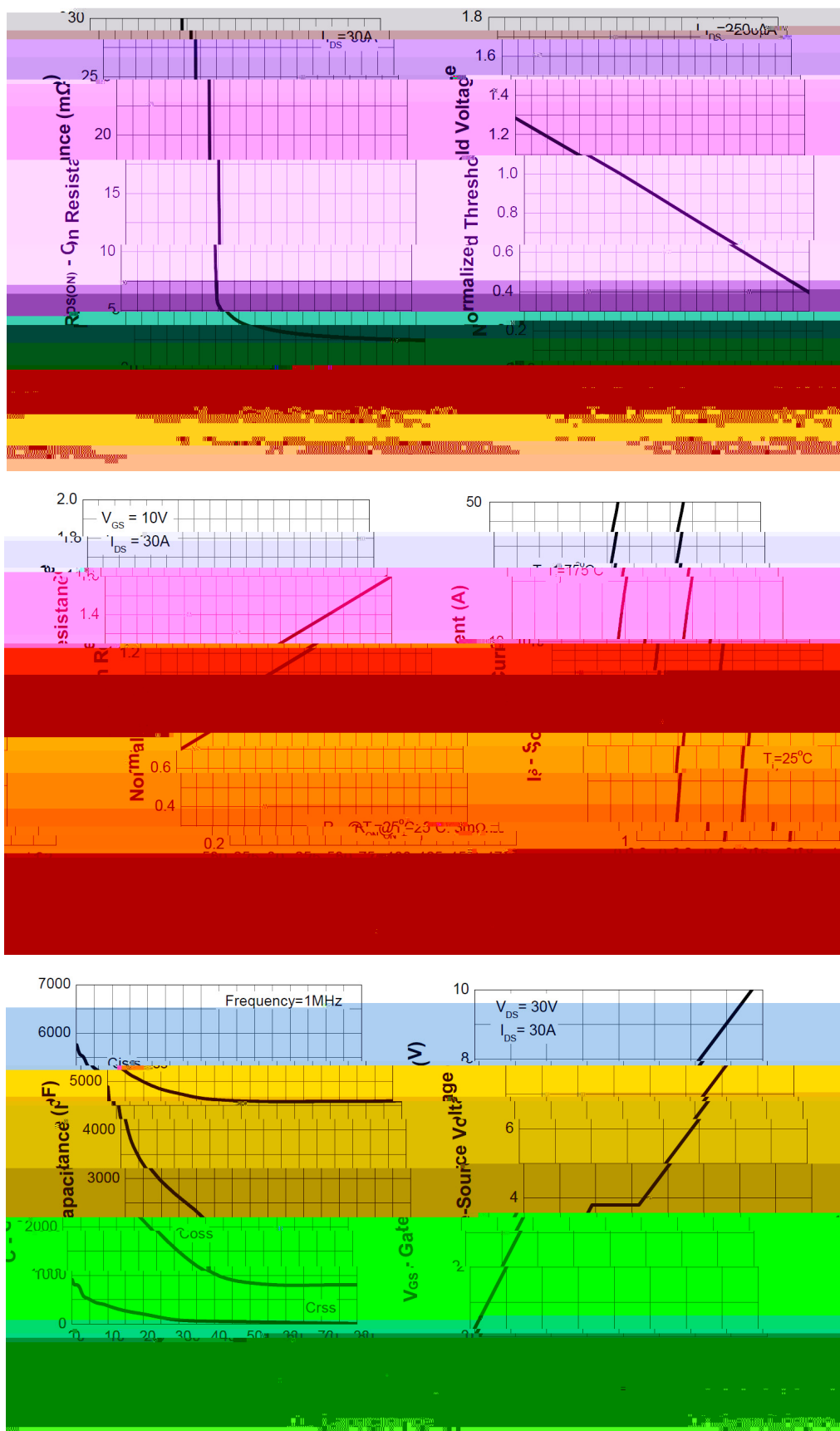
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	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



/ Electrical Characteristic Curve



/ Marking Instructions



BR	公司代码
EU	公司代码
022N06S	产品型号代码
----	批次号
****	Lot No. Code, code change with Lot No.

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