

BRC5008N04SSL

Rev.C Jan.-2026



DATA SHEET



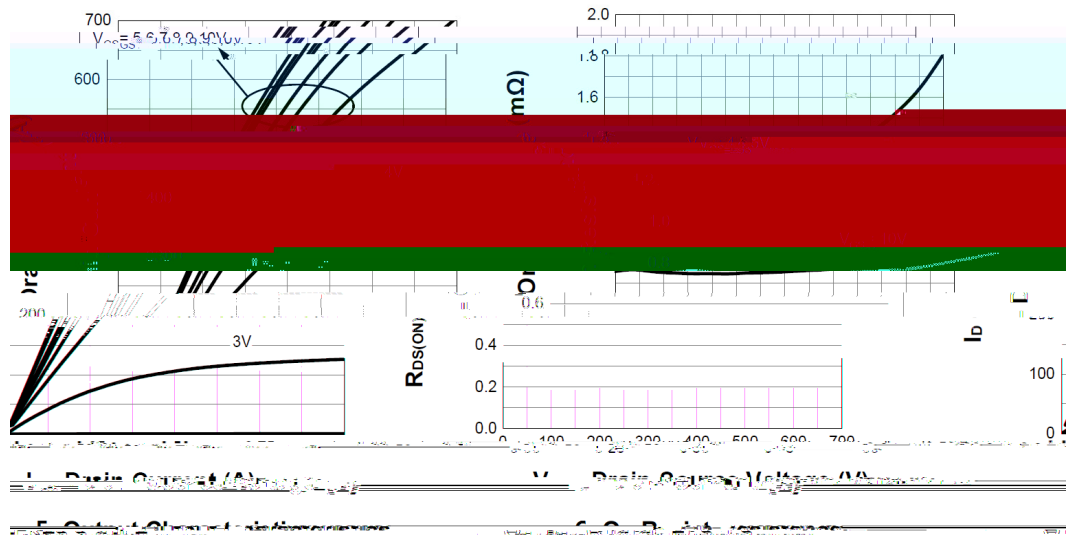
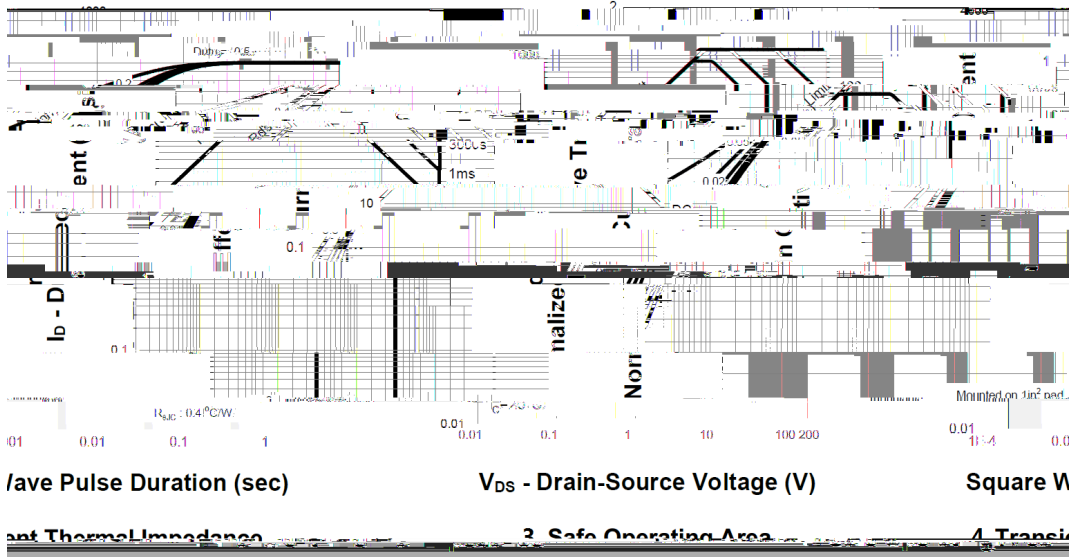
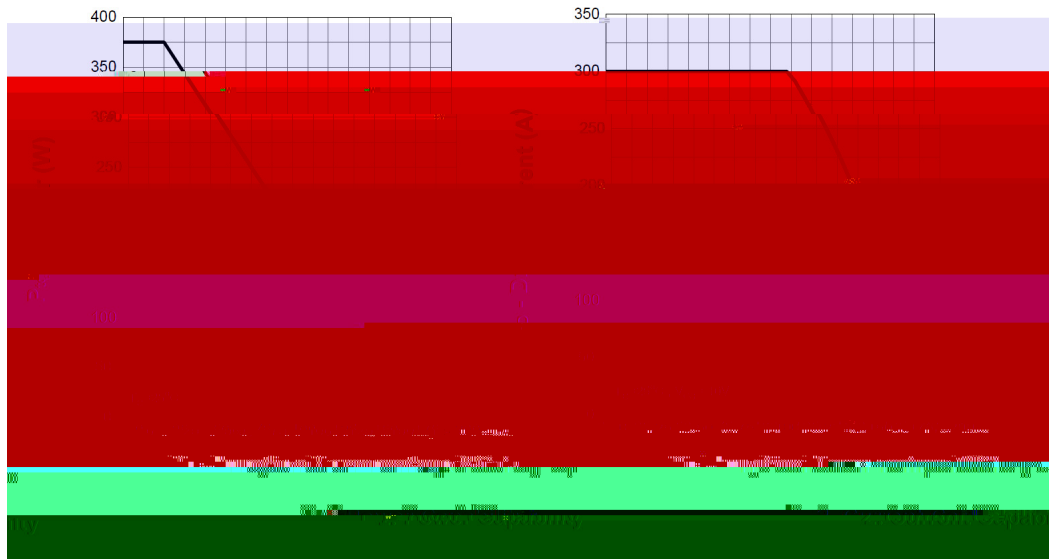
Parameter	Symbol	Rating	Unit	Min	Typ
Drain-Source Voltage	V _{DS}	40	V		
Gate-Source Voltage	V _{GS}	±20	V		
Power Dissipation	I _D (T _C =25 °C)	300	A		
	D(T _C =100 °C)	300	W		
	P _D (T _C =25 °C)	375	W		
Operating and Storage Temperature Range	T _J , T _{stg}	-55 to 175	°C		
	(T _C =25 °C)	300	A		
Thermal resistance, junction – case	E _{AS}	1512	mJ		
	J _A	60	°C/W		

DD=40V, L=1.0mH
 2 pad area, t_{10 sec} 2. Pulse width 300 μs, duty cycle 2% 3. limited by bonding wire

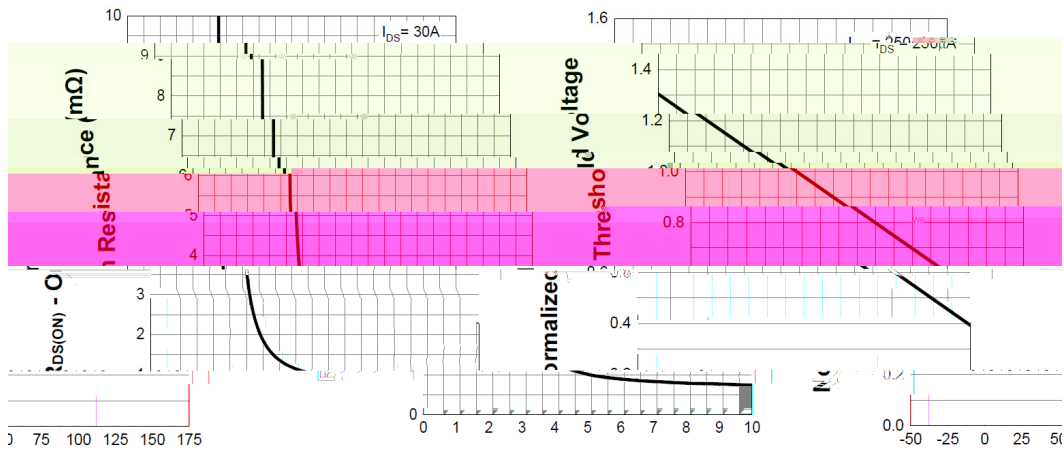
Drain-Source Breakdown Voltage	BV	V _{GS} =0V	I _D =250μA	40	V
	G _{GS(th)}	V _{DS} =V _{GS}	I _D =250μA	1.0	2.0
		V _{GS} =0V			1
	G _{SS}	V _{GS} =±20V	V _{DS} =0V		±0.1
On-Resistance		I _D =30A	0.75	0.85	m
Drain-Source Diode Forward	SD	V _{GS} =4.5V	I _D =20A	1.15	1.45
		V _{GS} =0V	I _S =30A		1.3
	r _{rr}	I _S =30 A, V _{GS} =0 V	dI _S /dt = 100 A/μs	21	nS
Input Capacitance	C _{iss}	V _{DS} =20V	V _{GS} =0V	14406	pF
Output Capacitance	C _{oss}	f=1.0MHz		1043	
Reverse Transfer Capacitance	C _{rss}			369	

Parameter

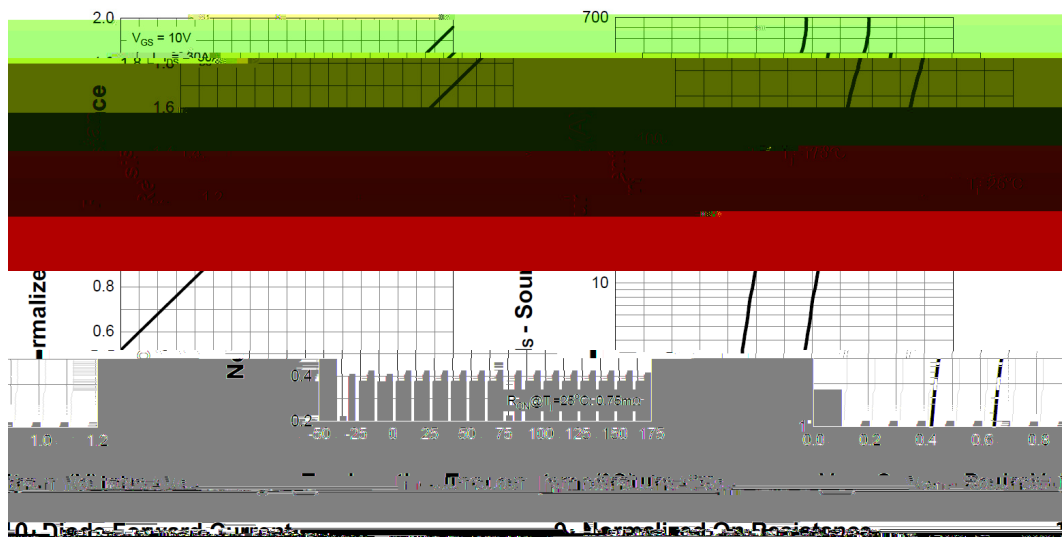
/ Electrical Characteristic Curve



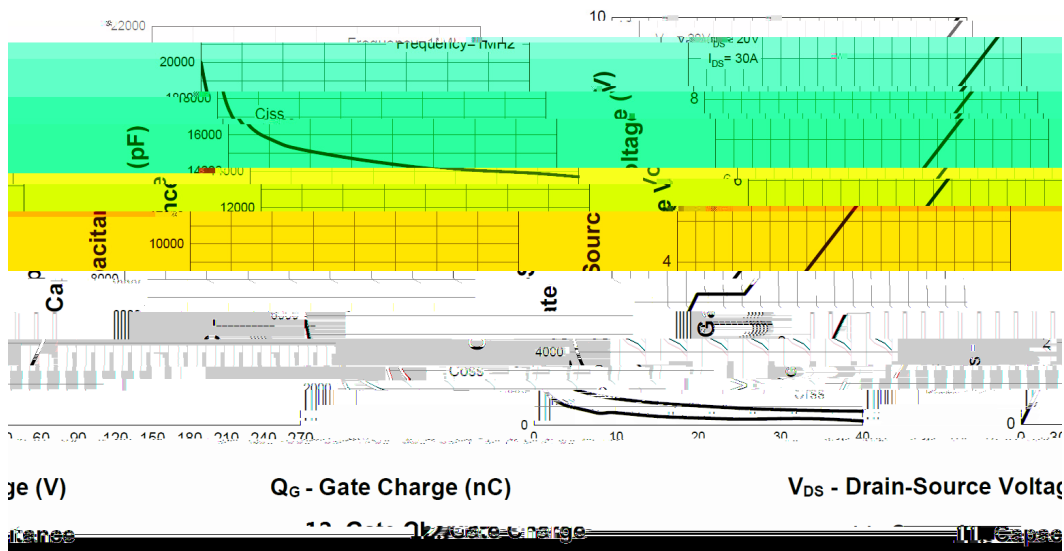
/ Electrical Characteristic Curve



Normalized Threshold Voltage // Transfer Characteristics

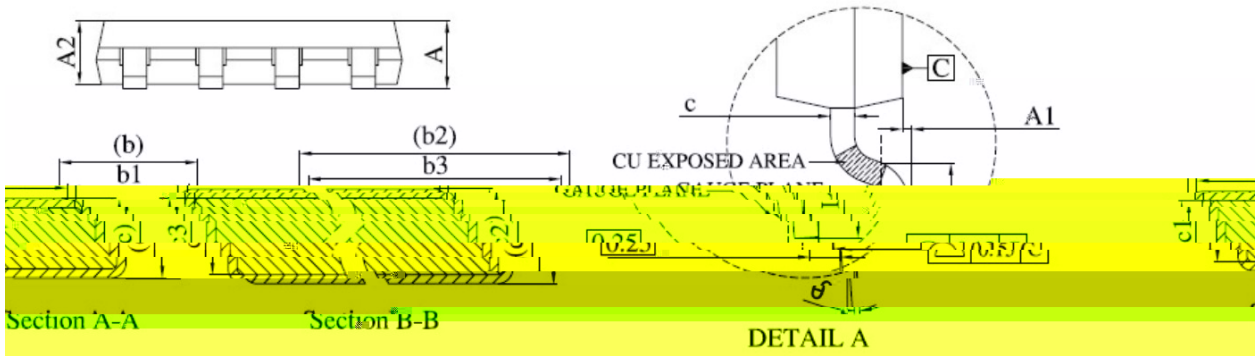
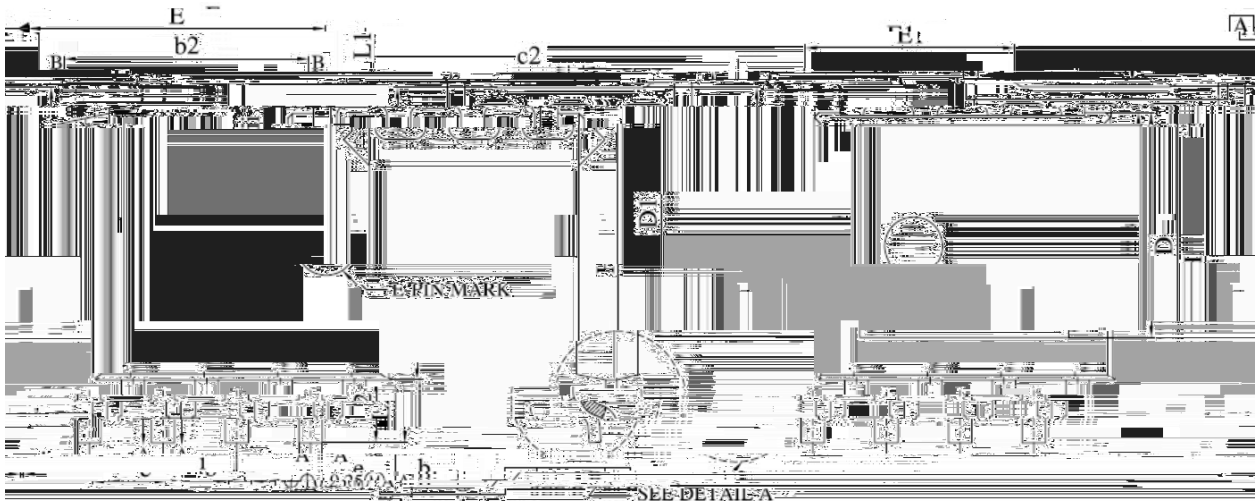


Normalized Drain-Source Current // Normalized Drain-Source Current



Gate Charge // Drain-Source Voltage

/ Package Dimensions



Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	MIN	MAX	Symbol	MIN	MAX
A	1.00	1.30	F1	4.95	5.30
A1	0.00	0.15	F1 L1	3.50	3.70
A2	0.98	1.12	e	1.27/BSC.	
b	0.35	0.50	H	5.95	6.25
bL	0.33	0.40	∅	0.25	
b2	4.00	4.41	I	0.50	0.00
b3	4.00	4.37	L1	0.27	0.00
c	0.19	0.25	∅	0.80	

/ Marking Instructions



BR

008N04S

Note

BR: Company Code

008N04S: Product Type Code

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

BRCS008N04SSL