[redacted]

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	VDS	40	V
Gate-Source Voltage	V_{GS}	±20	V
	I_D(Tc=25)	300 A	
	D(Tc=100) 300	W	
	DM(Tc=25) 1200	A	
Power Dissipation	P_D(Tc=25) 375	W	
Operating and Storage Temperature Range	TJ,Tstg	-55 to 175	
	(Tc=25)300	A	
	DD=40V,L=1.0mH) E_{AS}	1512	mJ
[redacted]	θJA	60	
Thermal resistance, junction – case			

[redacted]

[2] pad area, t ≤ 10 sec 2. Pulse width ≤ 300 μs, duty cycle ≤ 2 % 3. limited by bonding wi

[redacted]

[redacted]

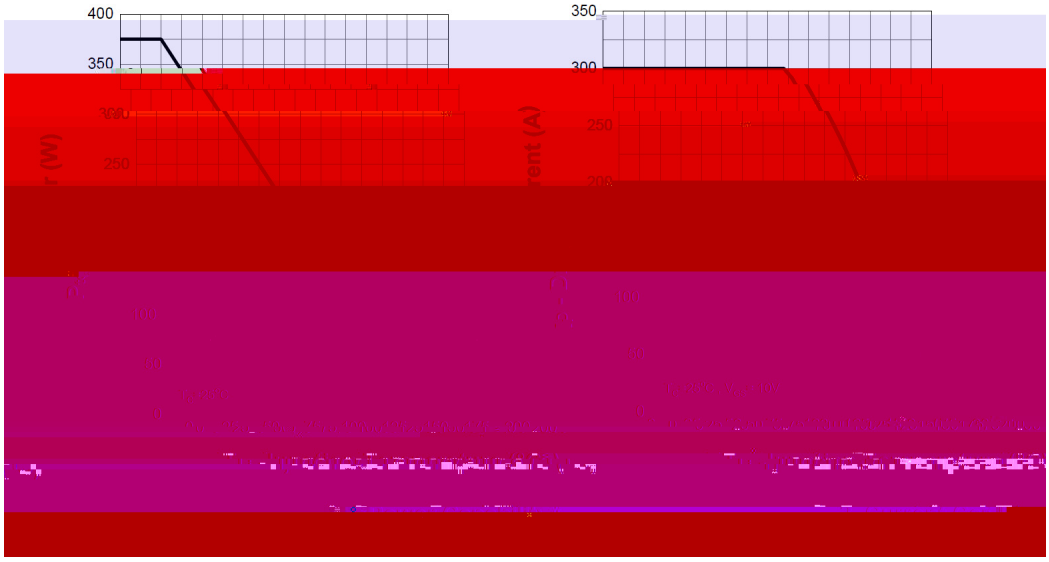
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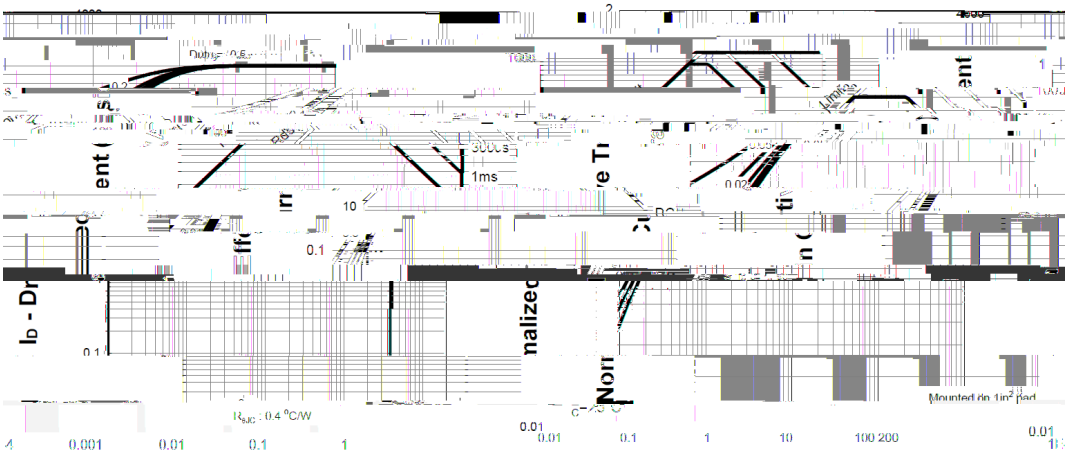
Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV	V_{GS}=0V	I_D=250μA	40			V
	GS(th)	V DS=V GS	I D=250μA	1.0		2.0	V
[redacted]		=32V	VGS=0V			1	μA
	GSS	GS=±20V	V_{DS}=0V			±0.1	μA
[redacted]		ID=30A		0.75	0.85	mΩ	
On-Resistance		VGS=4.5V	ID=20A		1.15	1.45	mΩ
Drain-Source Diode Forward	SD	V_{GS}=0V	I_S=30A			1.3	V
		= 30 A, VGS= 0 V dI	33		nS		
	rr	SD/dt = 100 A/μs	21		nC		
Input Capacitance	C_{iss}				14406		pF
Output Capacitance	C_{oss}	VDS=20V	VGS=0V		1043		
Reverse Transfer Capacitance	Crss	f=1.0MHz			369		

[redacted]

Parameter

/ Electrical Characteristic Curve

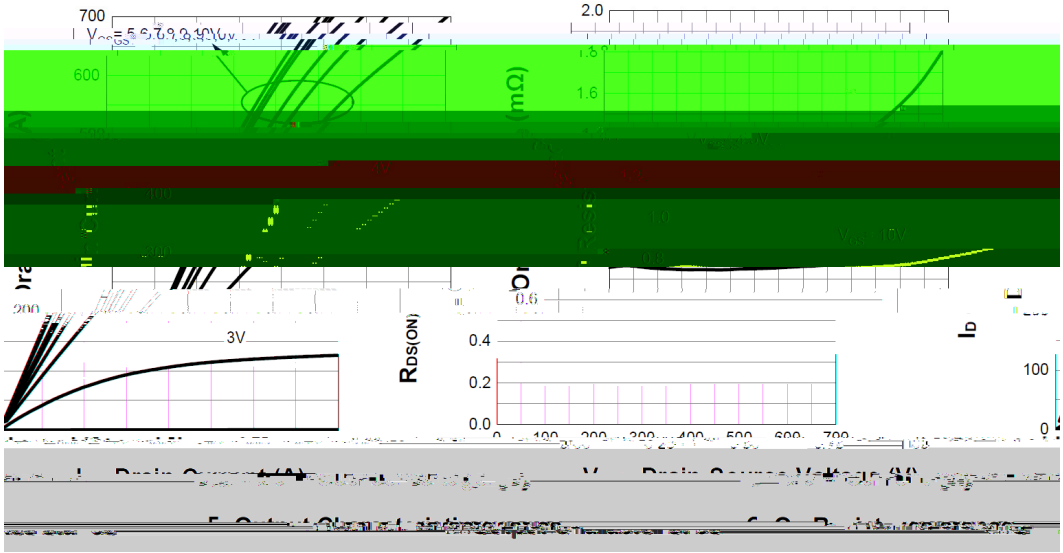




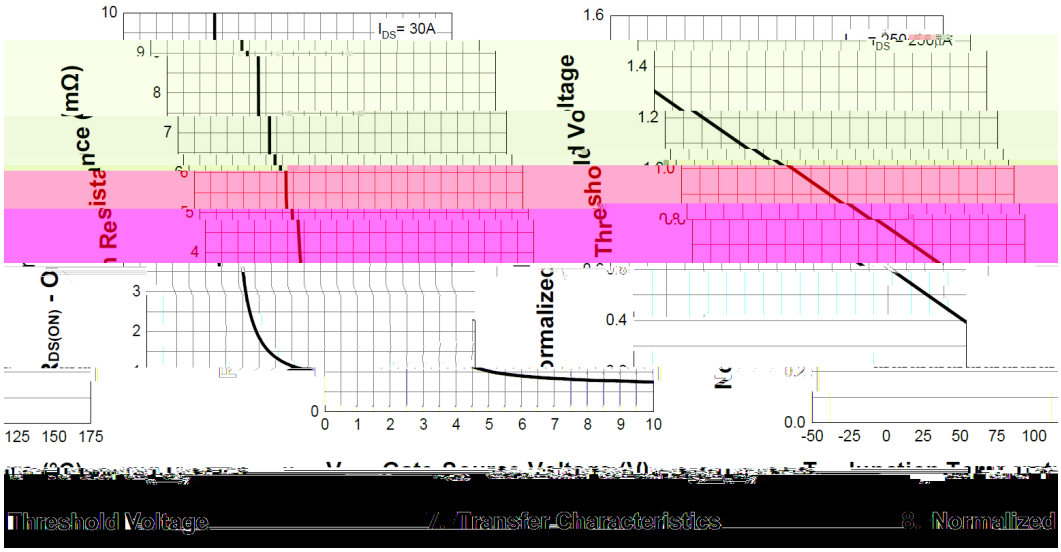
quare Wave Pulse Duration (sec)

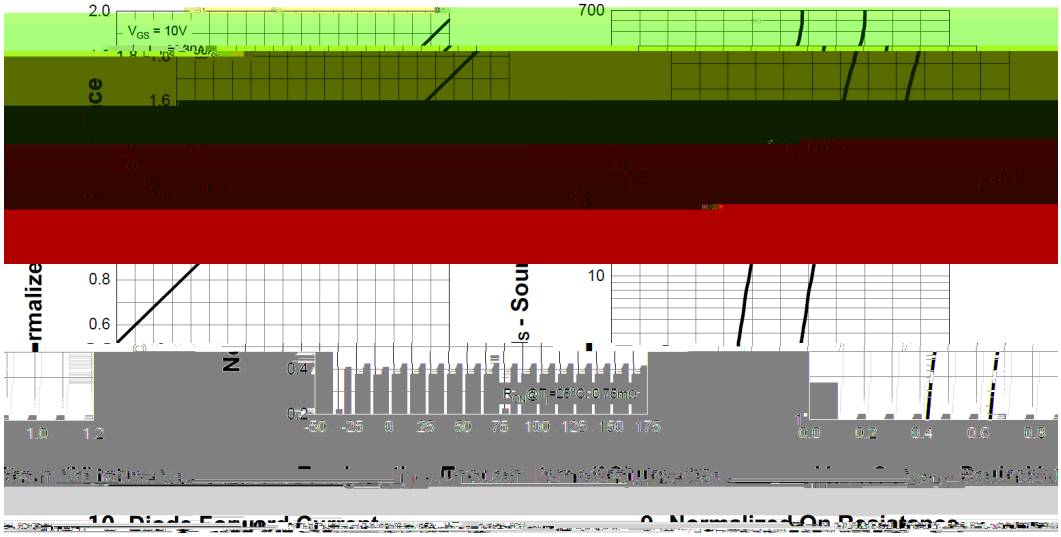
V_{DS} - Drain-Source Voltage (V)

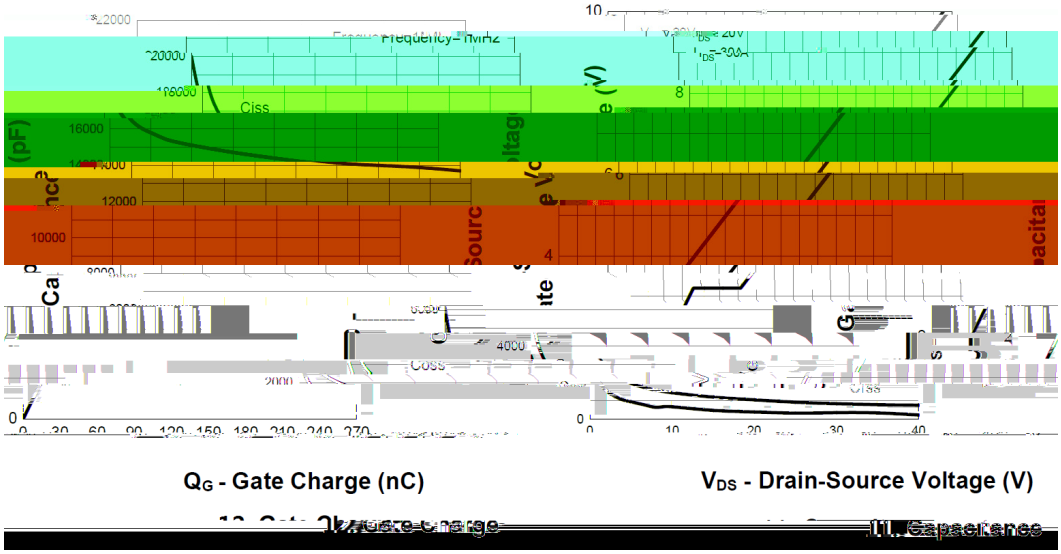
Transient Thermal Impedance 3. Safe Operating Area



/ Electrical Characteristic Curve



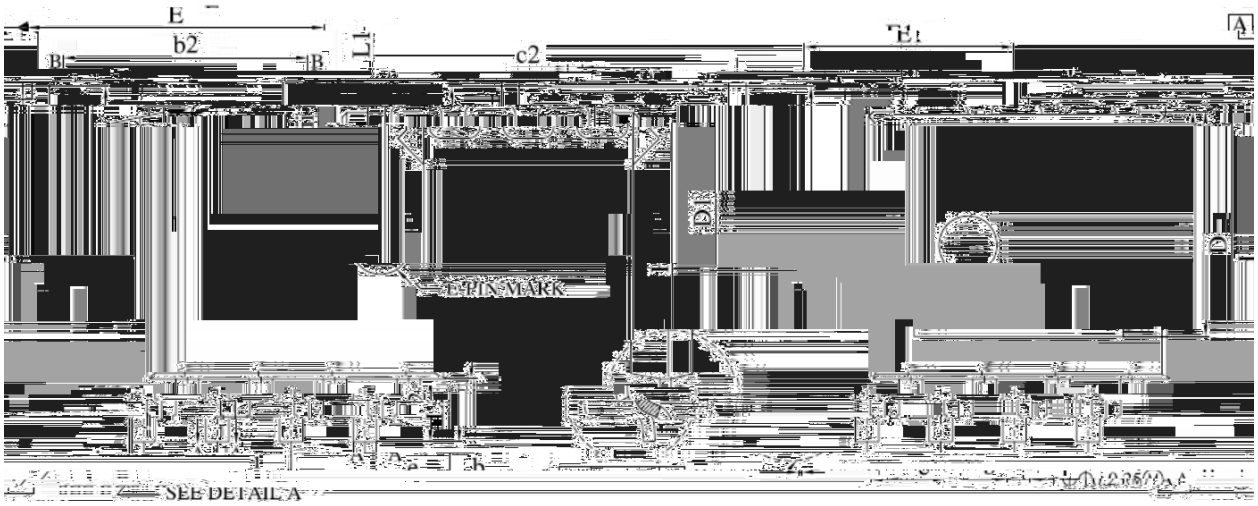


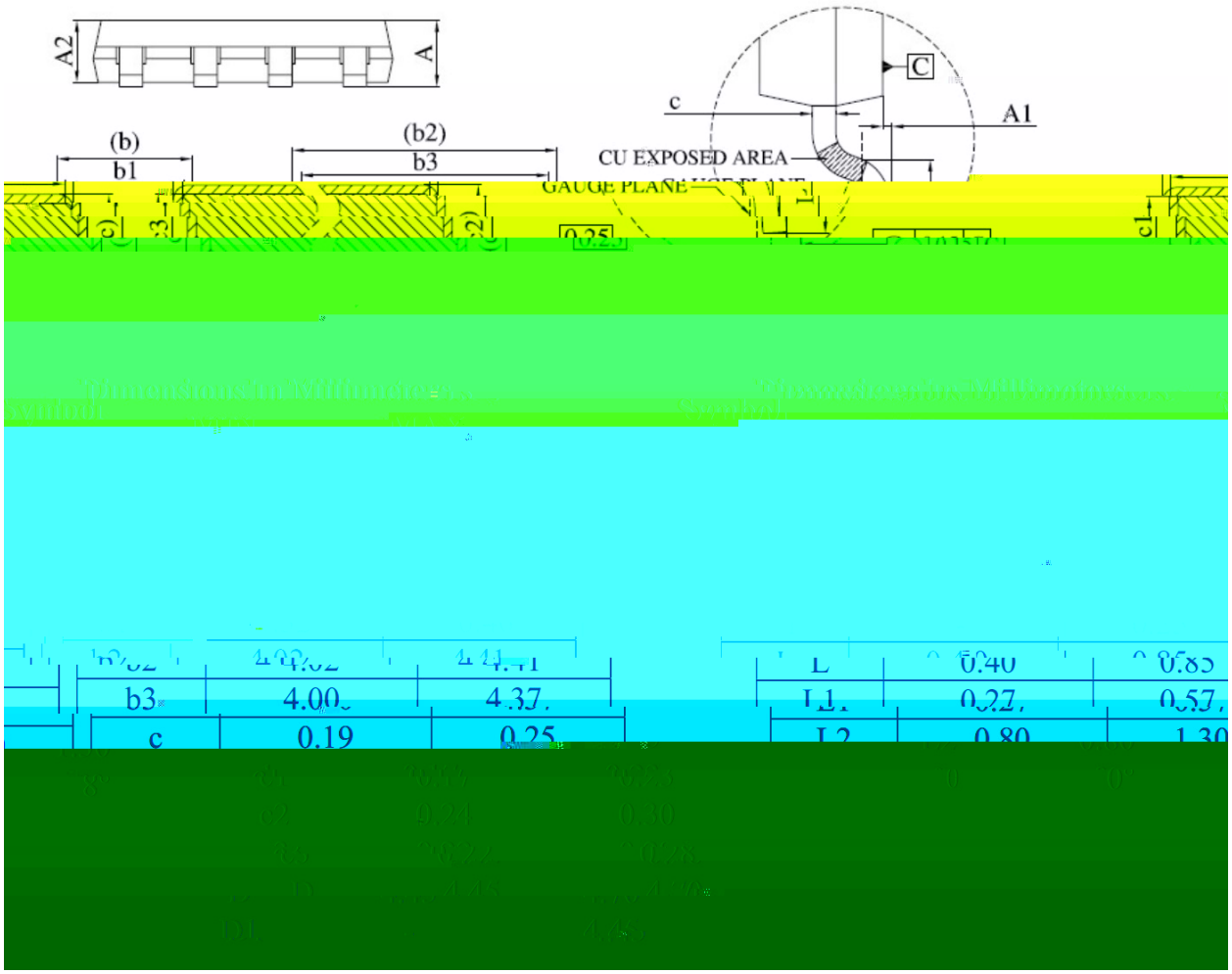


Q_G - Gate Charge (nC)

V_{DS} - Drain-Source Voltage (V)

/ Package Dimensions





Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min.	Max.	Min.	Max.	
b3	4.00	4.37			
c	0.19	0.25			
L	0.40	0.85			
L1	0.27	0.57			
L2	0.80	1.30			

/ Marking Instructions



BR

008N04S

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Note

BR:	Company Code
008N04S:	Product Type Code
****:	Lot No. Code, code change with Lot No.

BRCS008N04SSL