

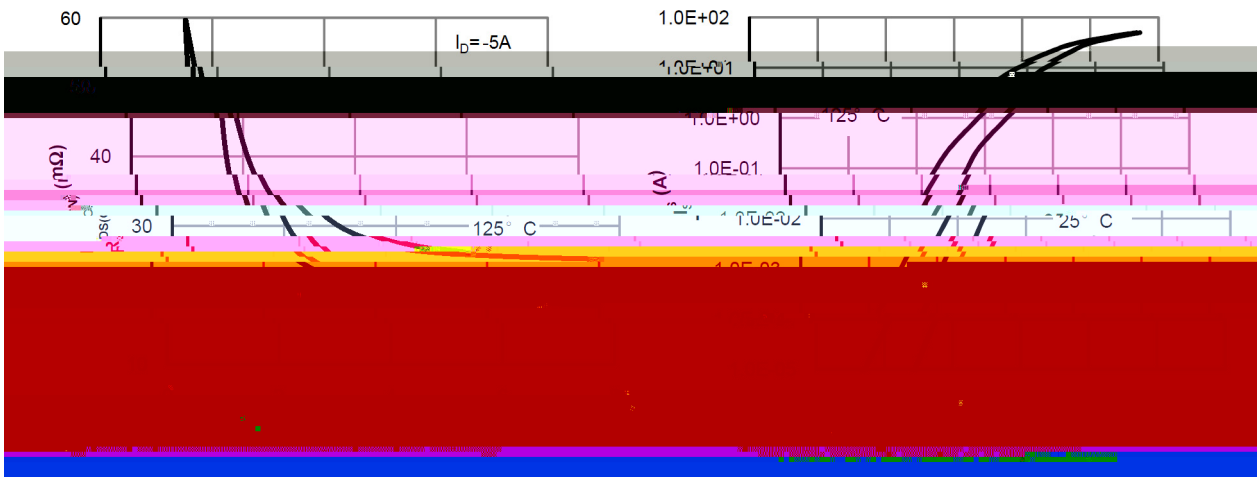
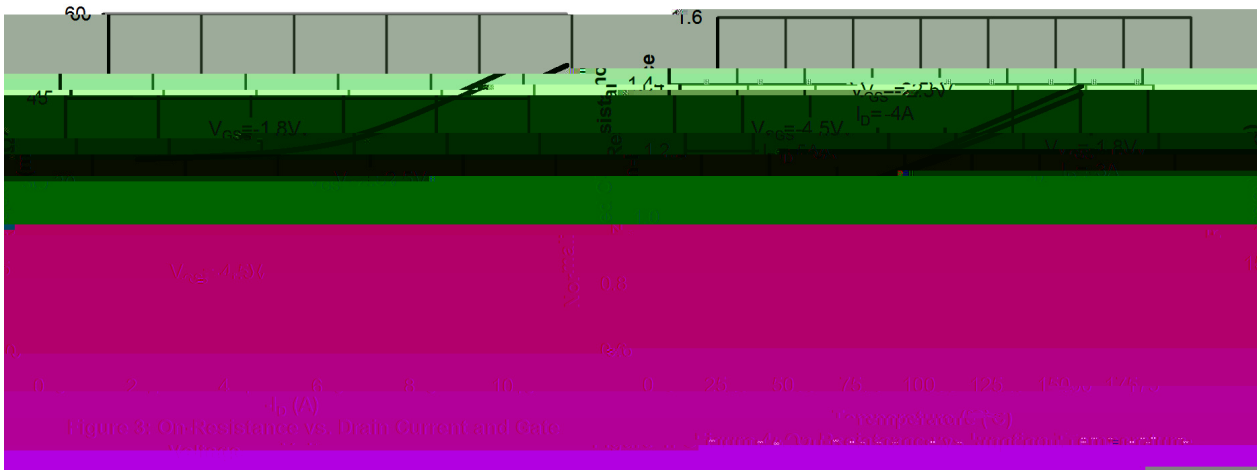
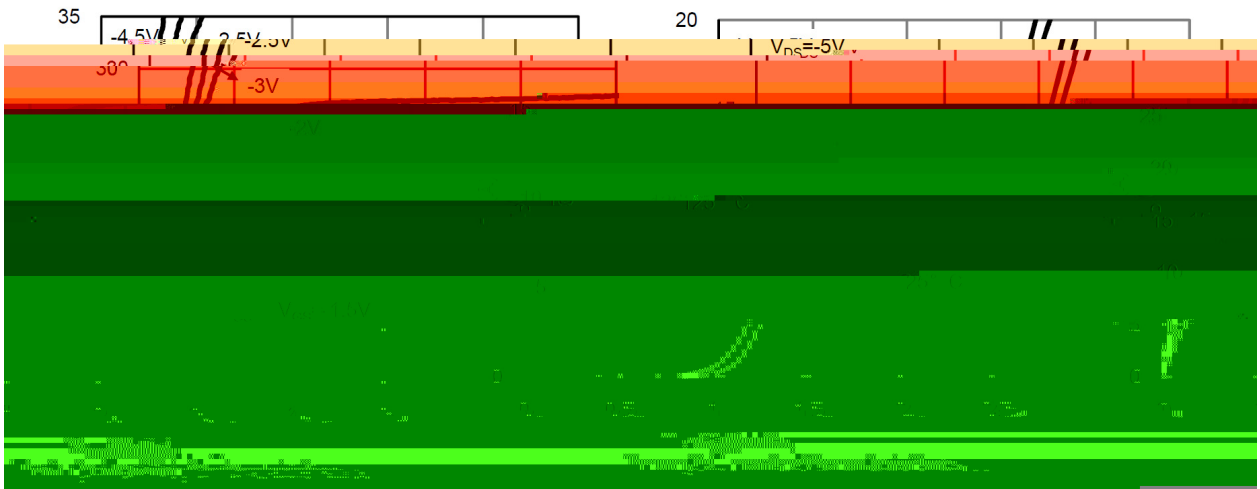
BRCS200P02ZJ
Rev.A Dec.-2023

/ Absolute Maximum Ratings($T_a=25$)

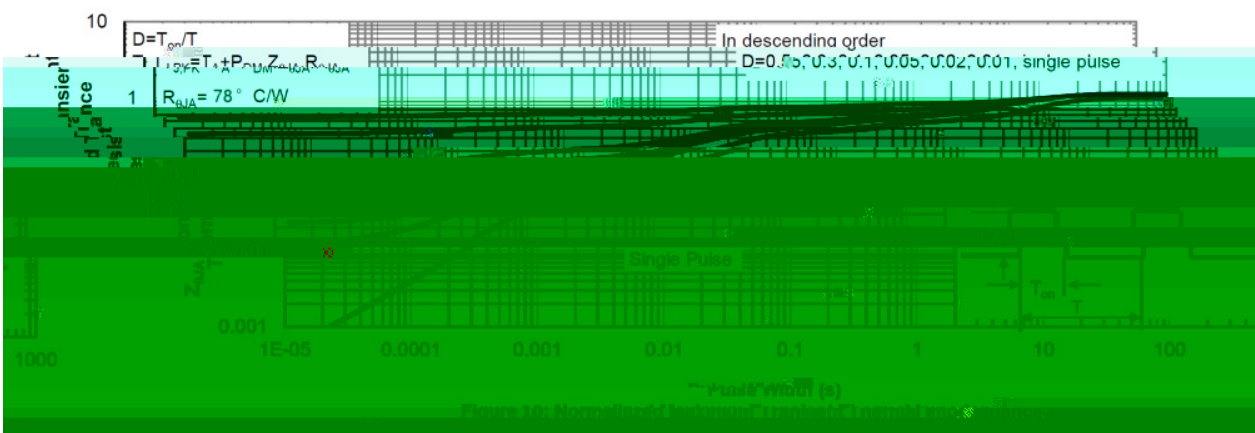
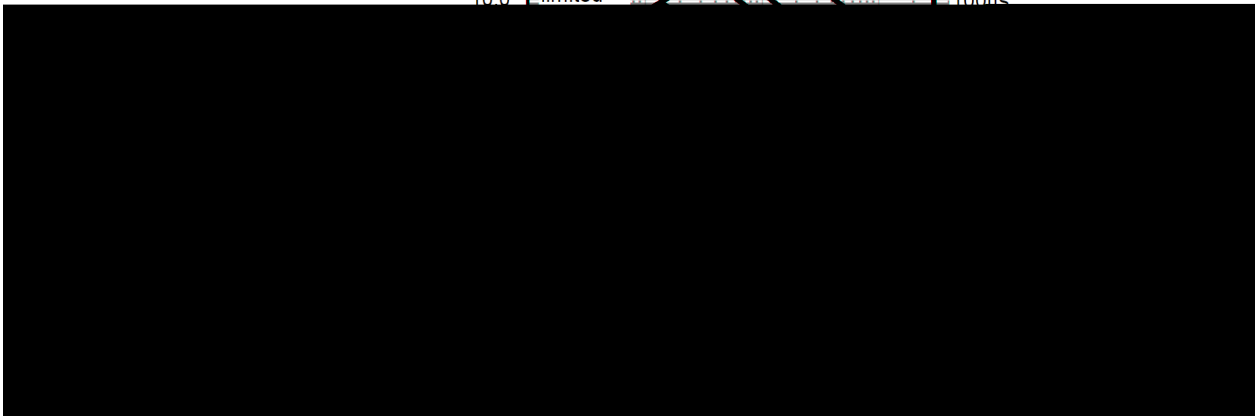
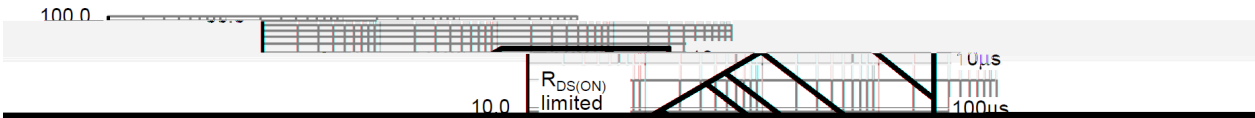
Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	V_{DSS}	-20	V	
Gate-Source Voltage	V_{GSS}	± 12	V	
Continuous Drain Current	$I_D (T_a=25^\circ C)$	-9.5	A	
Pulsed Drain Current	I_{DM}	-43	A	
Power Dissipation for Single Operation	$P_D (T_a=25)$	2.8	W	
Maximum Junction Temperature	T_j	150		
Storage Temperature Range	T_{stg}	-55 150		
Thermal Resistance-Junction to Ambient	t 10s	R_{JA}	45	/W
	Steady State		78	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D=-250\mu A$ $V_{GS}=0V$	-20	-22.5		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-20V$ $V_{GS}=0V$			-1.0	μA
Gate-Body leakage current	I_{GSS}	$V_{DS}=0V$ $V_{GS}=\pm 12V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu A$	-0.5	-0.6	-1.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=-4.5V$ $I_D=-5A$		20	22	m
		$V_{GS}=-2.5V$ $I_D=-4A$		26	30	
		$V_{GS}=-1.8V$ $I_D=-3A$		35	100	
Diode Forward Voltage	V_{SD}	$I_S=-1A$ $V_{GS}=0V$			-1.2	V
Gate resistance	R_g	$V_{GS}=0V,$ $f=1MHz$ $V_{DS}=0V,$		11		
Input Capacitance	C_{iss}	$V_{GS}=0V$ $V_{DS}=-5V$ $f=1MHz$		1700		pF
Output Capacitance	C_{oss}			600		
Reverse Transfer Capacitance	C_{rss}			450		
Total Gate Charge	Q_g	$V_{GS}=-4.5V,$ $V_{DS}=-10V,$ $I_D=-6A$		13		nC
Gate Source Charge	Q_{gs}			2.5		
Gate Drain Charge	Q_{gd}			4.2		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=-4.5V$ $R_L=1.25$ $V_{DS}=-10V$ $R_{GEN}=3$		7.5		ns
Turn-On Rise Time	t_r			29.2		
Turn-Off Delay Time	$t_{d(off)}$			103		
Turn-Off Fall Time	t_f			50		

/ Electrical Characteristic Curve



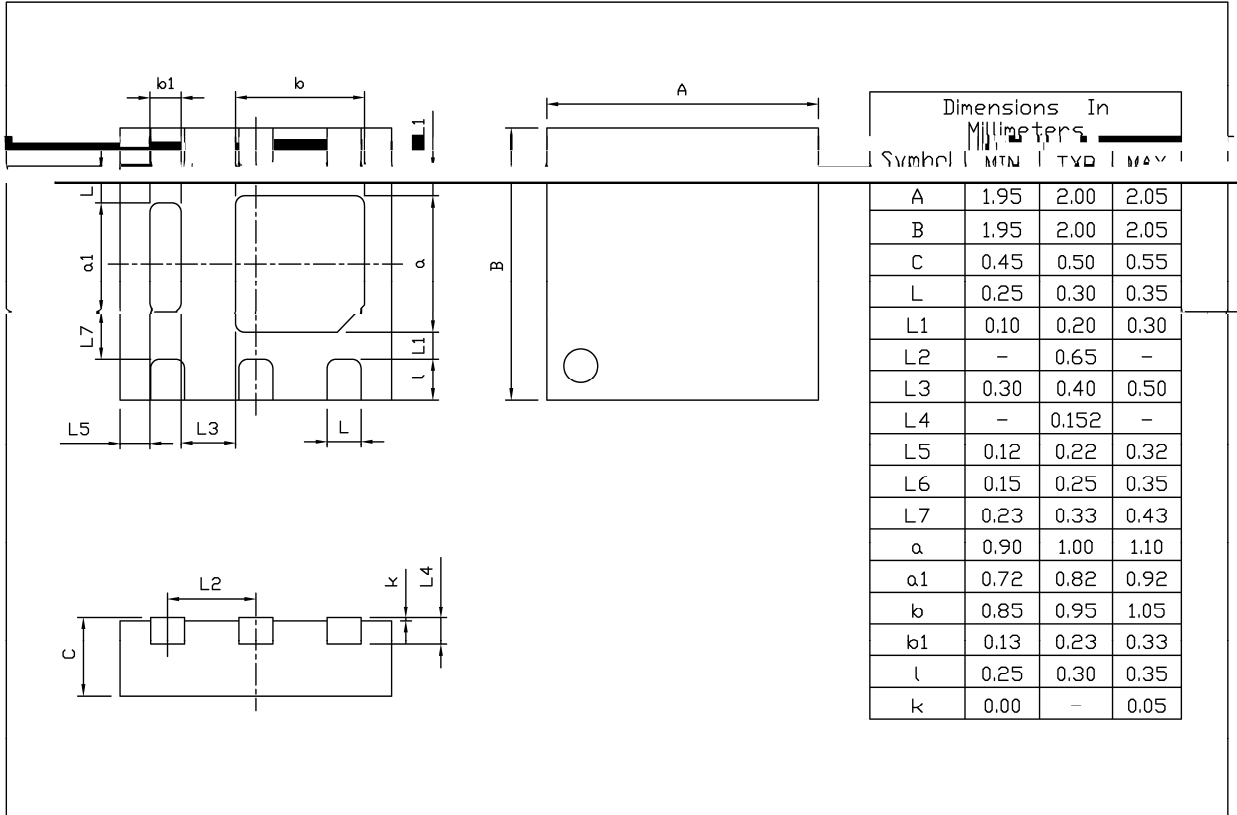
Electrical Characteristic Curve



/ Package Dimensions

DFN2 x2B-6L-0.5

Unit:mm



Rev.01 202006

/ Marking Instructions



BR

200P02

Note:

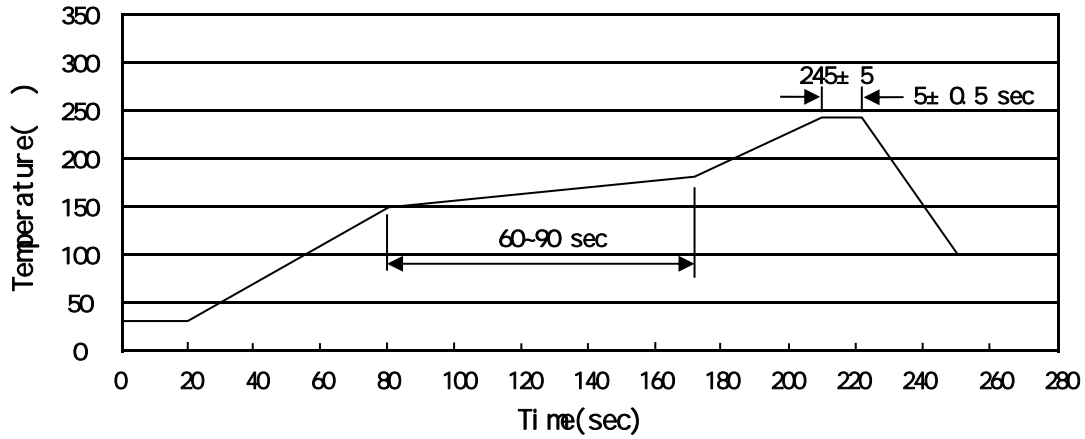
BR: Company Code

200P02: Product Type Code

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



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Note:

- | | | | | | |
|---|--------|-----|------------|--------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245..5 | | 5..0.5sec; | | 2.Peak Temp.:245..5 , Duration:5..0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260..5 10..1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
DFN2x2B-6L	4,000	10	40,000	4	160,000	7 ×8	210×205×205	445×435×230

/ Notices