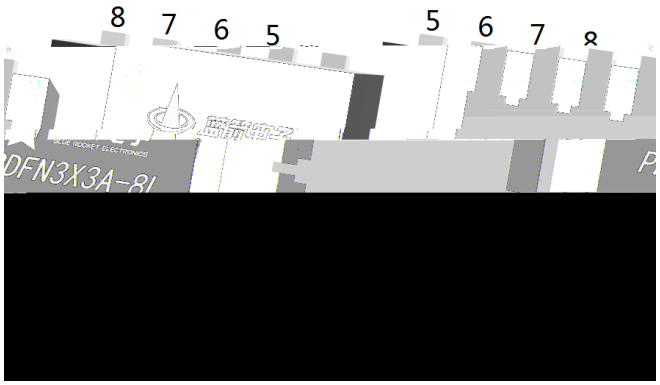
PDFN3×3A-8L P
P-Channel MOSFET in a PDFN3×3A-8L Plastic Package .

Low $R_{DS(ON)}$ to minimize conductive loss;low Gate Charge for fast switching;Low Thermal resistance;HF Product.

/
Notebook AC-in Load Switch,Battery Protection Charge/Discharge



PIN1、2、3： S PIN4：G PIN5、6、7、8：D

/ Absolute Maximum Ratings(T_a=25)

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-30	V
Drain Current - Continuous		I_D(T_c=25℃)	-24	A
Drain Current – Pulsed		I_{DM}	-80	A
Gate-Source Voltage		V_{GS}	±20	V
Power Dissipation		P_D(T_c=25℃)	20	W
Single Pulse Avalanche Energy(L=0.5mH)		E_{AS}	152	mJ
Avalanche Current(L=0.5mH)		I_{AS}	19.5	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	
Thermal resistance, junction - ambient	t ≤ 10s	$R_{\theta JA}$	30	/ W
	Steady-State		65	
Thermal resistance, junction - case	Steady-State	$R_{\theta JC}$	7	

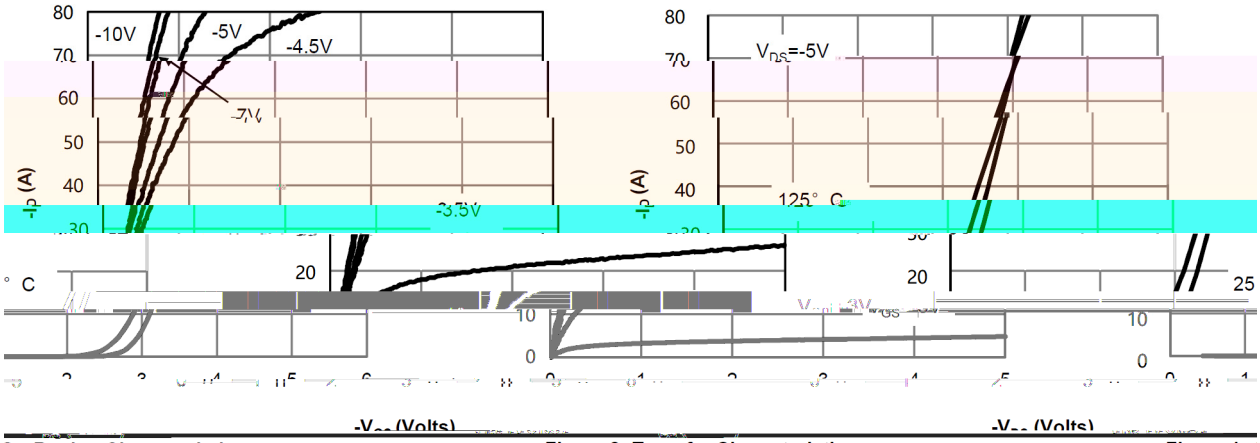
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA V_{GS}=0V	-30	-33		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30V V_{GS}=0V			-1.0	uA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}= ±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS I_D=-250μA	-1.0	-1.3	-3.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-10A		17.5	20	m
		V_{GS}=-4.5V, I_D=-10A		25.5	30	
Diode Forward Voltage	V_{SD}	I_S=-1A, V_{GS}=0V			-1.2	V
Input Capacitance	C_{iss}	V_{DS}=-25V V_{GS}=0V f=1.0MHz		1430		pF
Output Capacitance	C_{oss}			580		
Reverse Transfer Capacitance	C_{rss}			350		
Gate resistance	R_g	V_{GS}=0V V_{DS}=0V f=1MHz		13		Ω
Total Gate Charge	$Q_{g(10V)}$	V_{GS}=-10V, V_{DS}=-15V, I_D=-9.7A		20		nC
Total Gate Charge	$Q_{g(4.5V)}$			9.5		
Gate Source Charge	Q_{gs}			3.5		
Gate Drain Charge	Q_{gd}			4.5		

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=-10V V_{DS}=-15V R_L=1.5Ω R_{GEN}=3Ω		10		ns
Turn-On Rise Time	t_r			5.5		
Turn-Off Delay Time	$t_{d(off)}$			26.1		
Turn-Off Fall Time	t_f			9.1		

/ Electrical Characteristic Curve



On-Region Characteristics　　Figure 2: Transfer Characteristics　　Figure 1: C

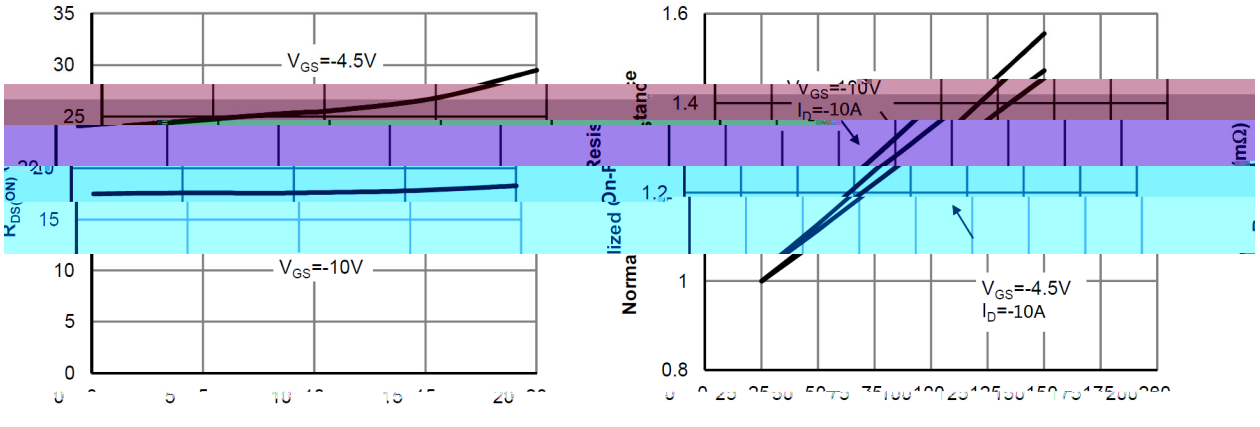


Figure 3: On-Resistance vs. Drain Current and Gate Voltage　　Figure 4: On-Resistance vs. Junction Temperature

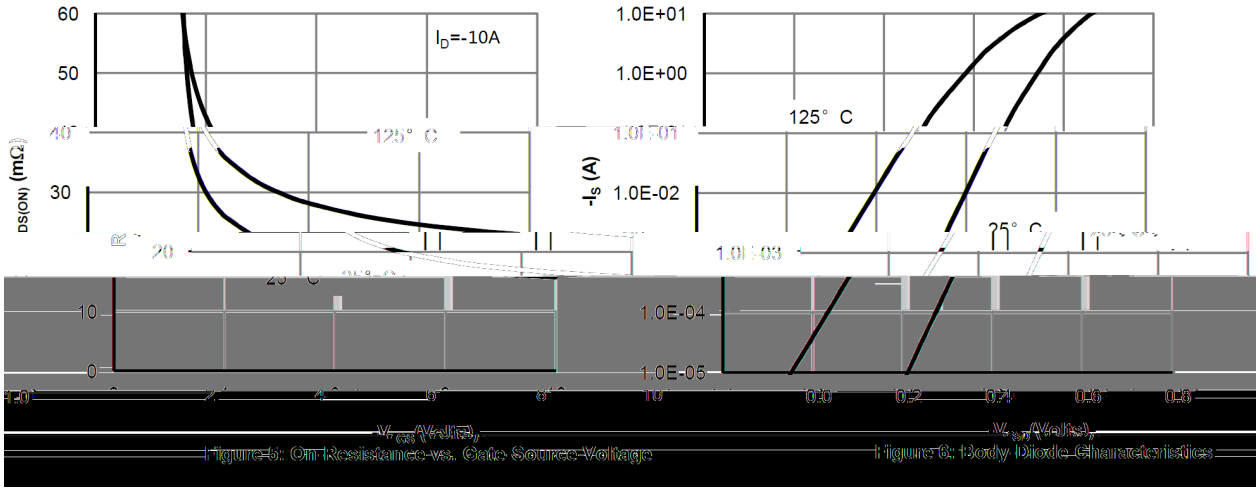
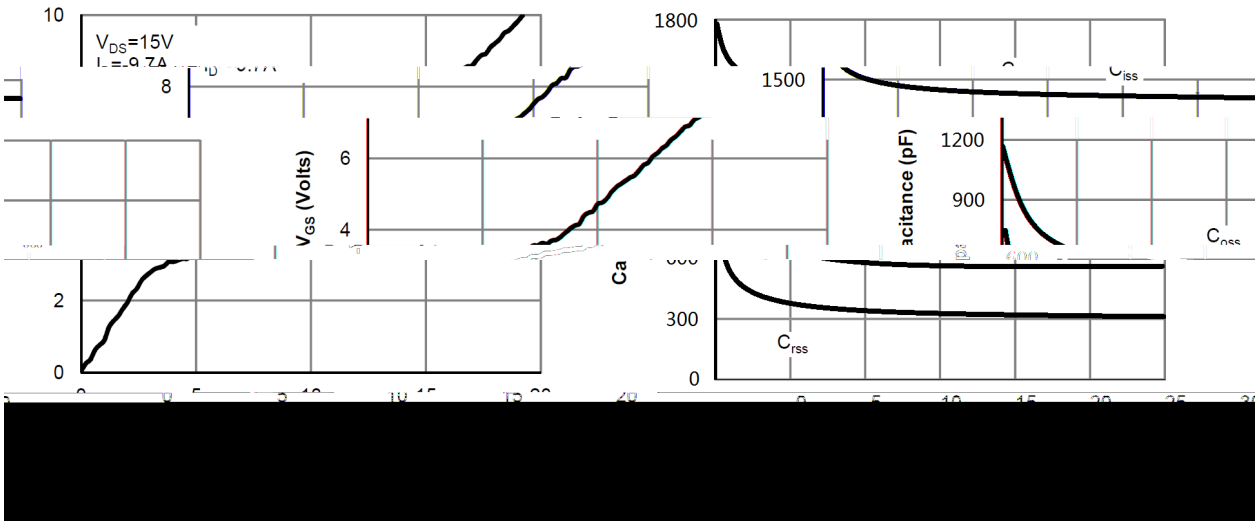
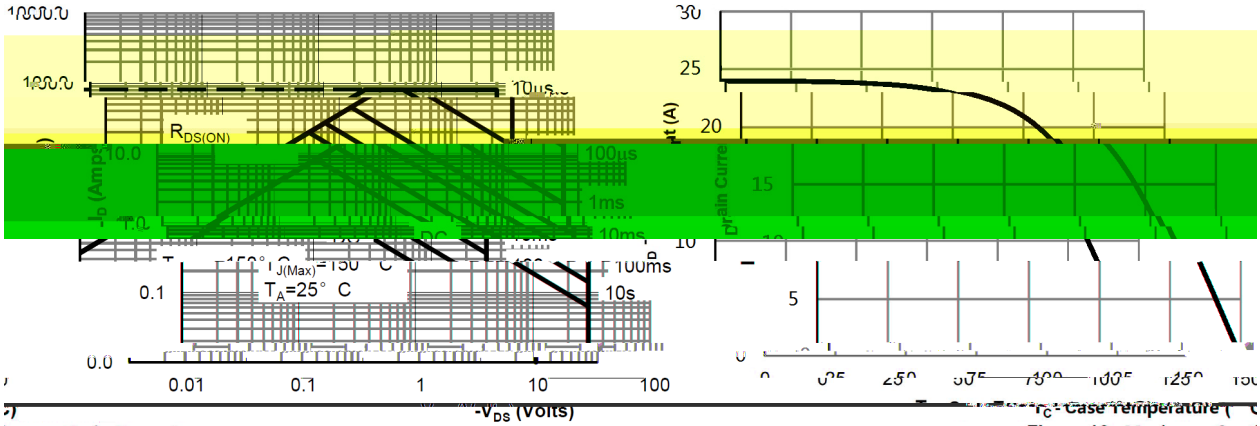


Figure 5: On-Resistance vs. Gate-Source Voltage　　Figure 6: Body Diode Characteristics

/ Electrical Characteristic Curve





imuous Drain Current

Figure 9: Maximum Forward Biased Safe Operating Area

Figure 10: Maximum Cont

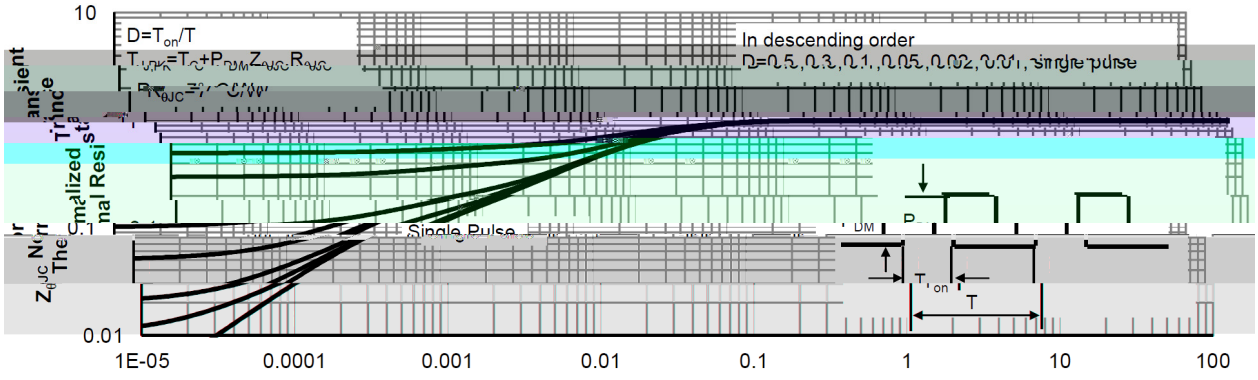
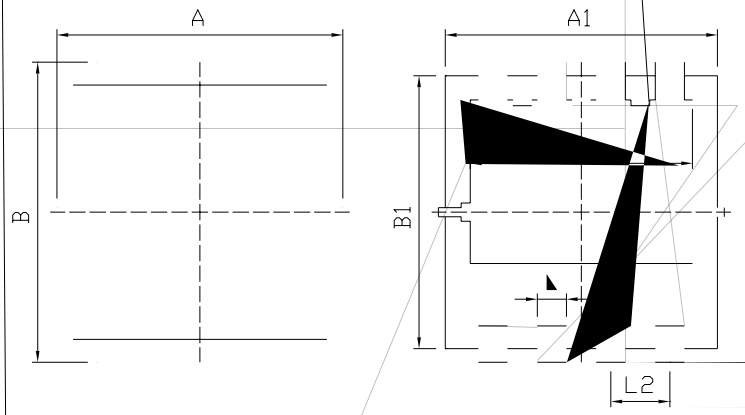


Figure 11: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

PDFN3X3A-8L

Unit:mm



Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	3.20	3.30	3.40
A1	3.10	3.15	3.20
B	3.20	3.30	3.40
B1	2.95	3.00	3.05
C	0.75	0.80	0.85
L	0.25	0.30	0.35
L1			0.75
L2	0.55	0.65	0.75
L4	0.14	0.15	0.20
a	2.35	2.45	2.55
b	1.635	1.735	1.835

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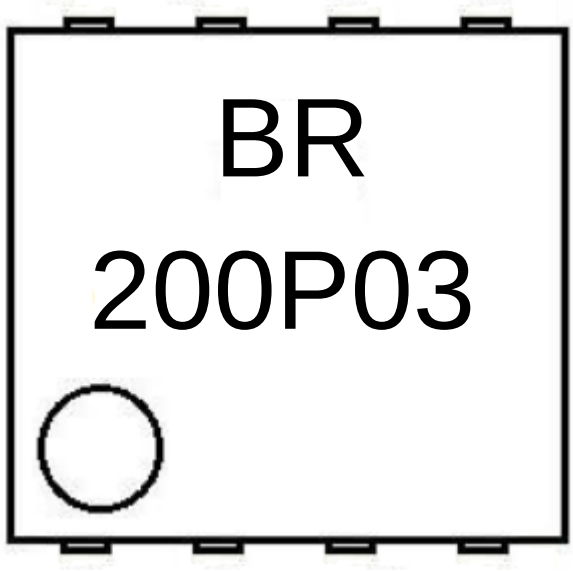
/ Marking Instructions



BR

200P03

Note:

BR:	Company Code.
200P03:	Product Type Code
****:	Lot No. Code, code change with Lot No

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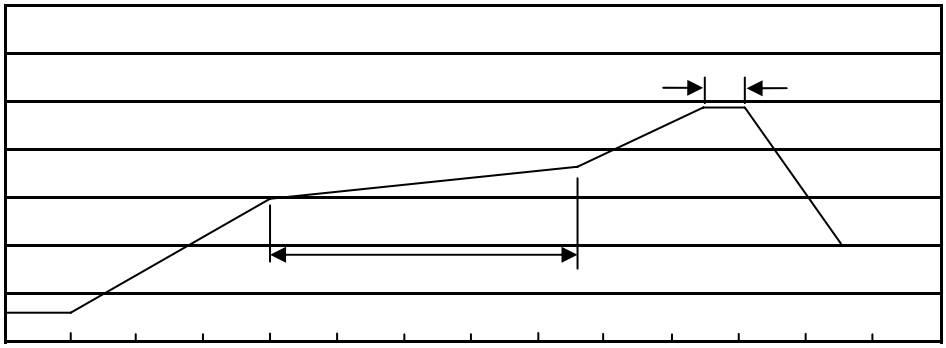

Note:

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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱
×						〃		

/ Notices