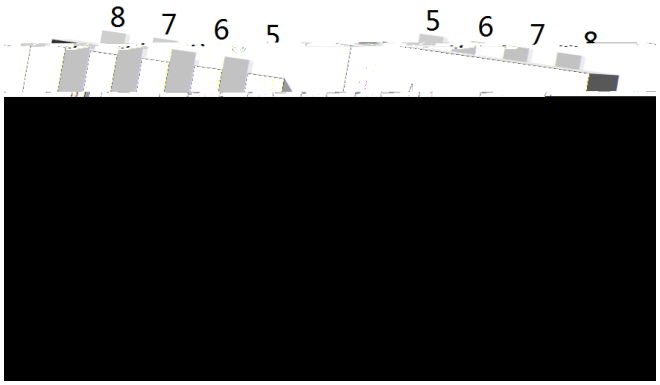
PDFN3×3A-8L P
P-Channel MOSFET in a PDFN3×3A-8L Plastic Package .

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	RdJA	30	/ W
	Steady-State		65	
Thermal resistance, junction - case	Steady-State	RdJC	7	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250εA 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=-250εA	-1.0	-1.3	-3.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-10A		17.5	20	mΩ
		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		q
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		

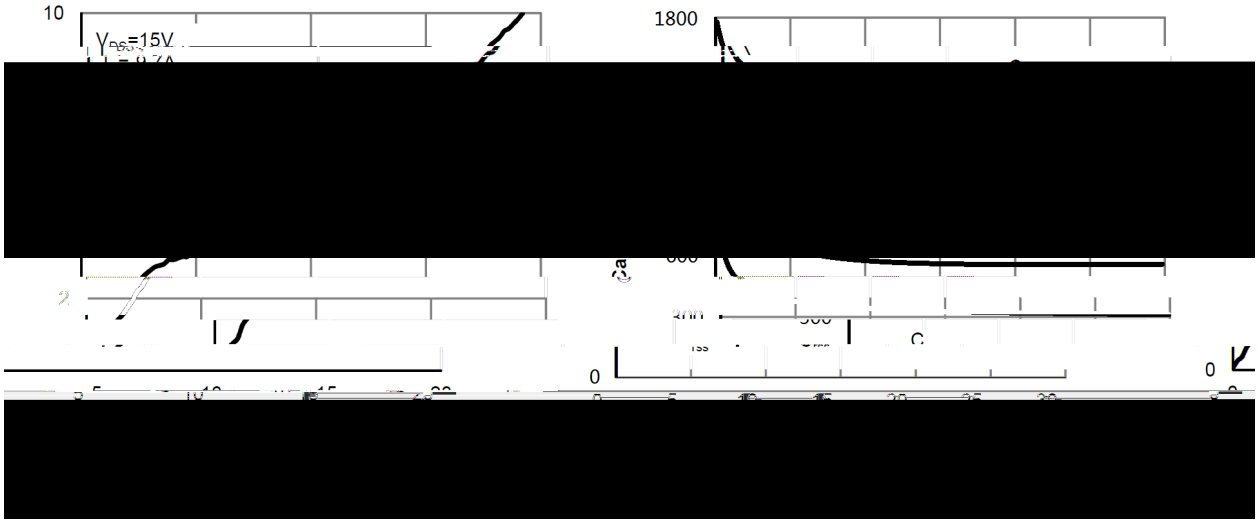
/ Electrical Characteristics(Ta=25)

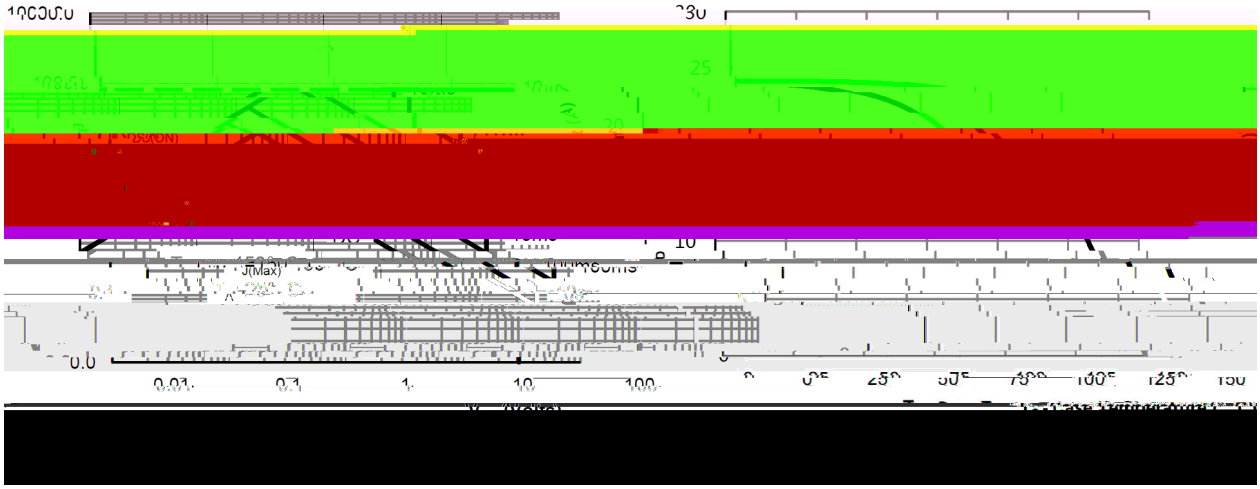
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=-10V V_{DS}=-15V R_L=1.5Ω R_{GEN}=3Ω		10		ns
Turn-On Rise Time	t_r			5.5		
Turn-Off Delay Time	$t_{d(off)}$			26.1		
Turn-Off Fall Time	t_f			9.1		

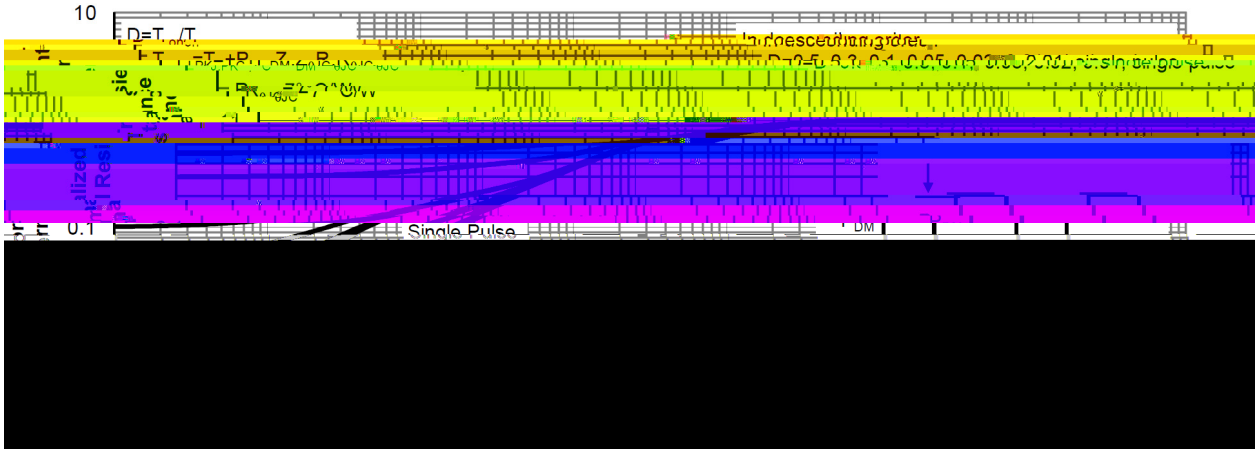
BRCS200P03YB

0859(.7c20Rev7Ac2159(2e)2250)2184.42e)2252eA

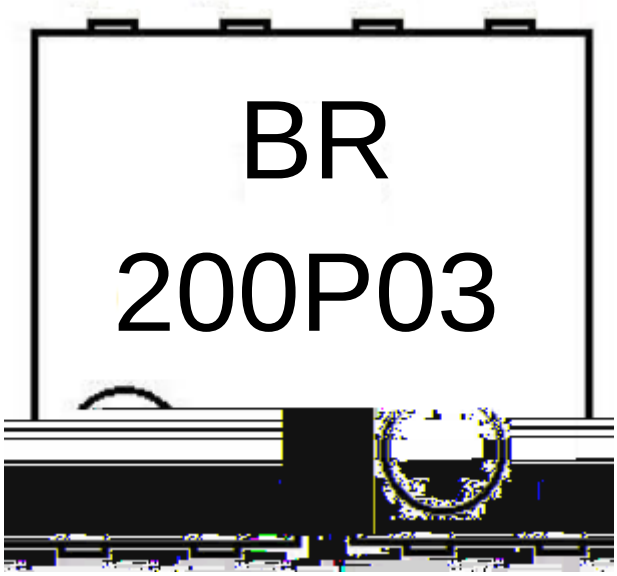
/ Electrical Characteristic Curve







/ Marking Instructions



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200P03

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Note:

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

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

		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