

BRCS200P03ZC

Rev.B Sep.-2024



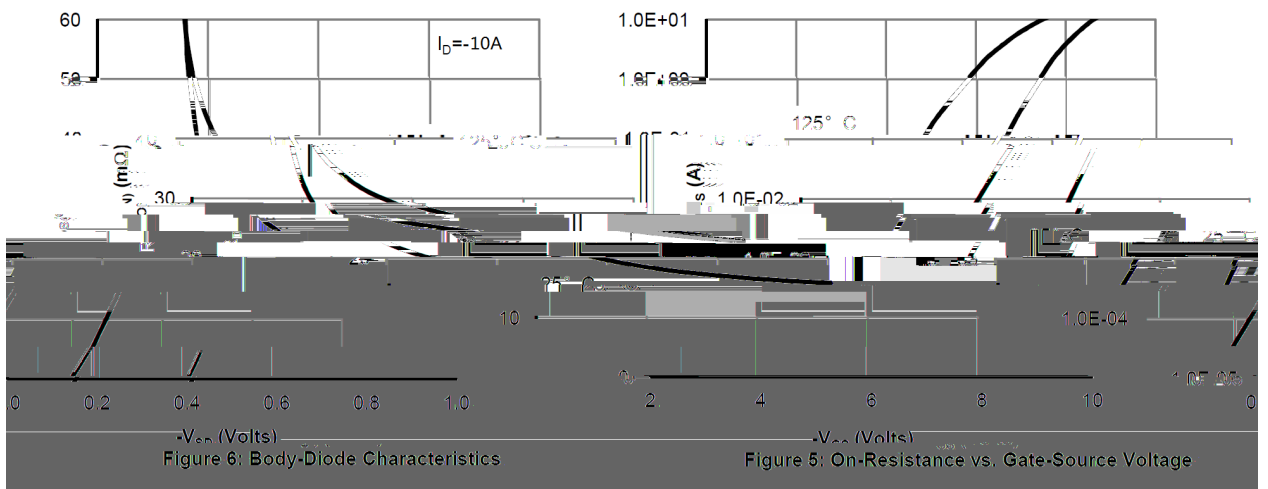
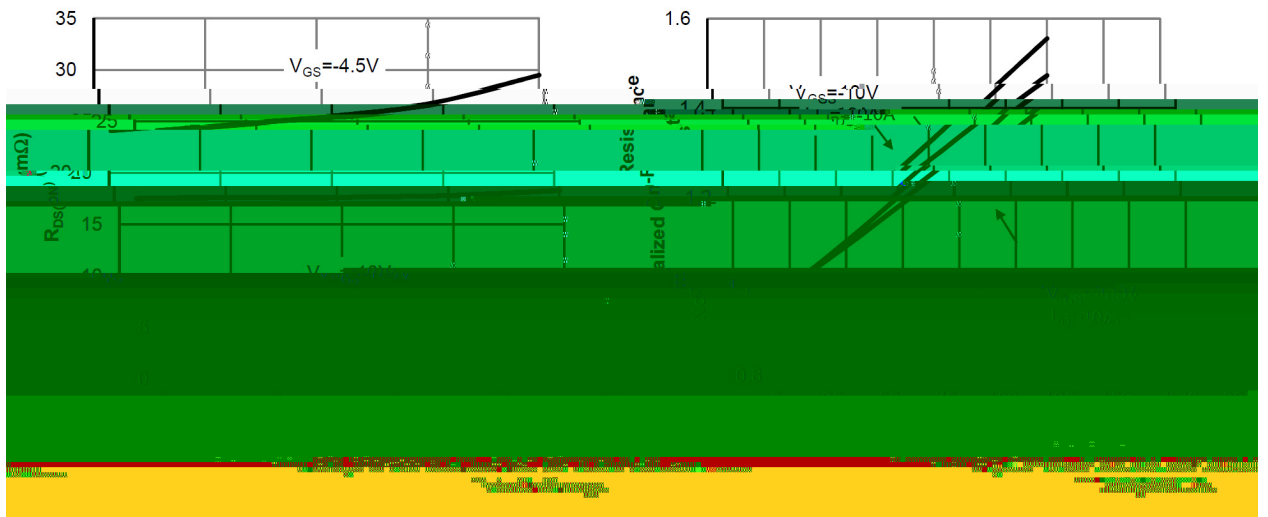
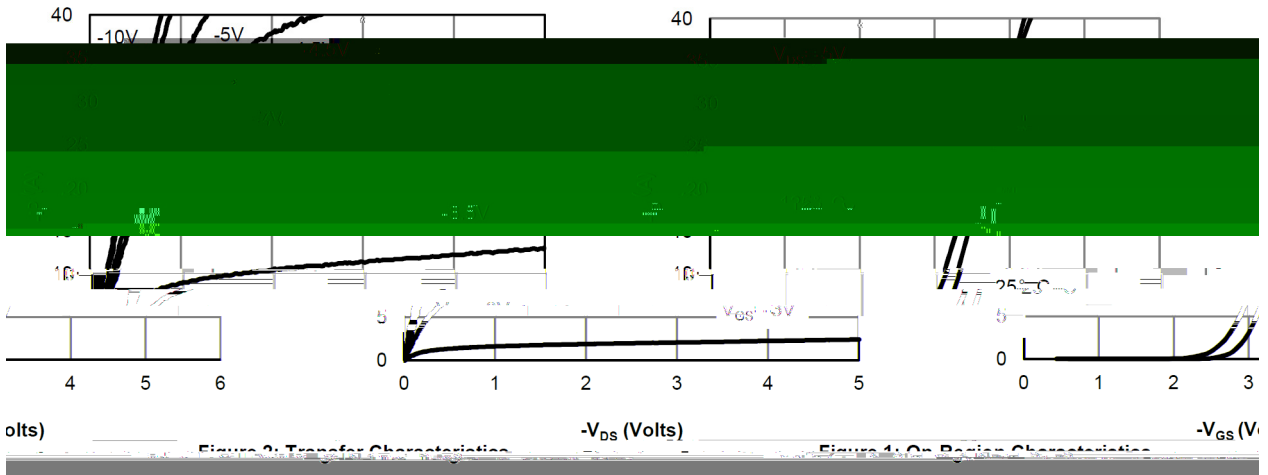
DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Drain Current - Continuous	$I_D(T_c=25^\circ\text{C})$	-30	A
Drain Current – Pulsed	I_{DM}	-92	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	28	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	28	/ W
	Steady-State	62	
Thermal resistance, junction - case	Steady-State	R_{JC}	

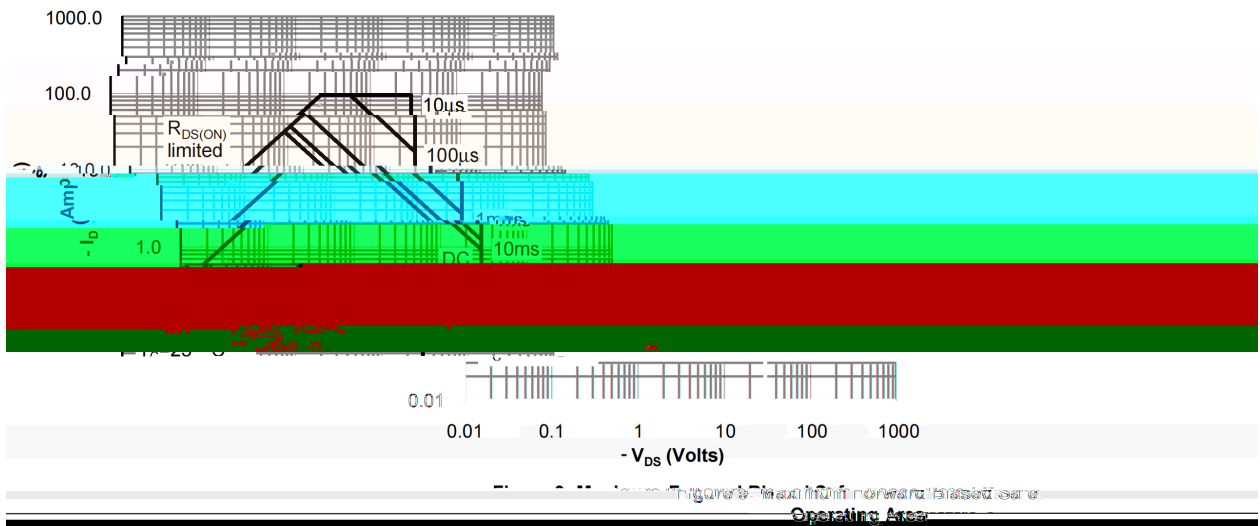
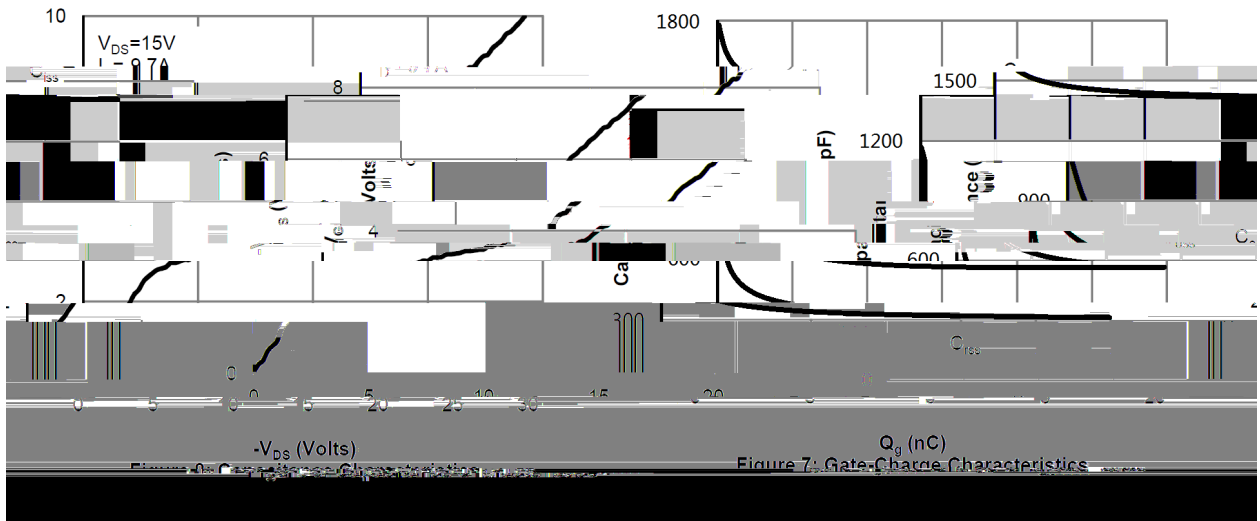
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=-10V$ $V_{DS}=-15V$ $R_L=1.5$ $R_{GEN}=3$		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



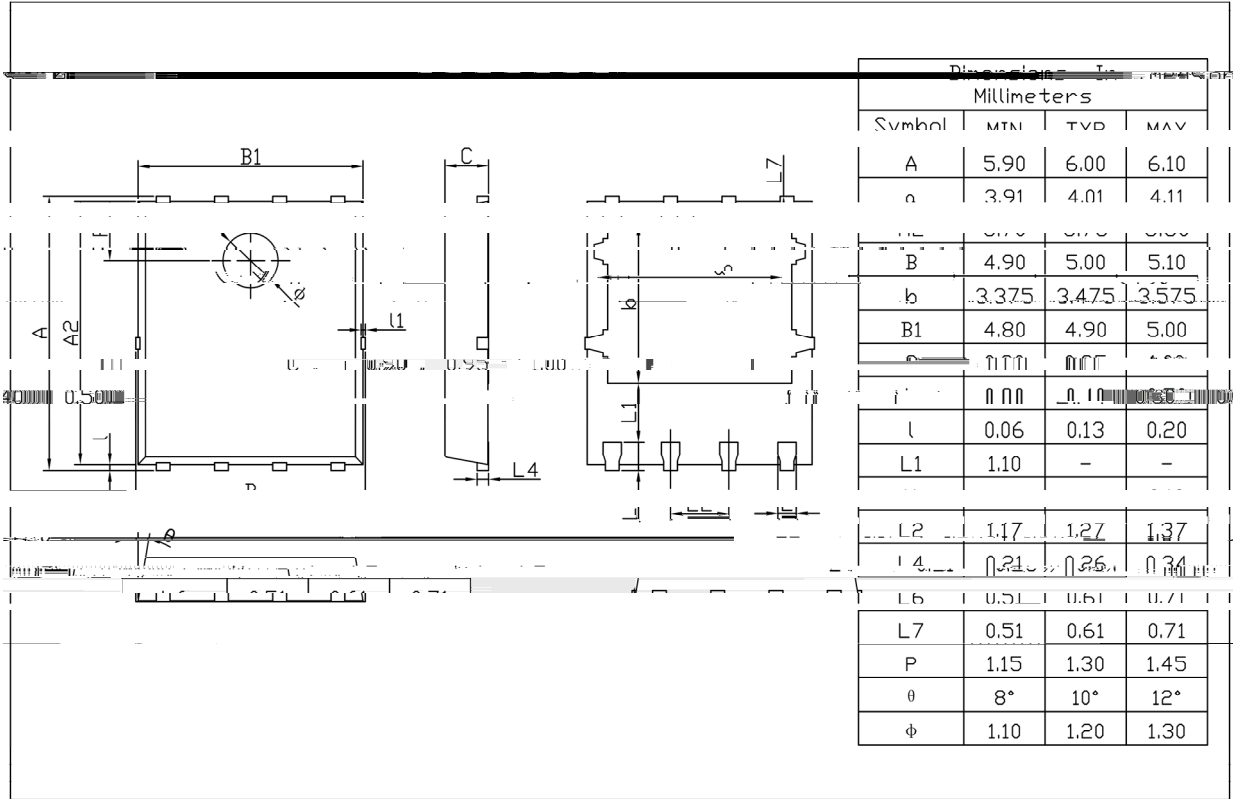
/ Electrical Characteristic Curve



/ Package Dimensions

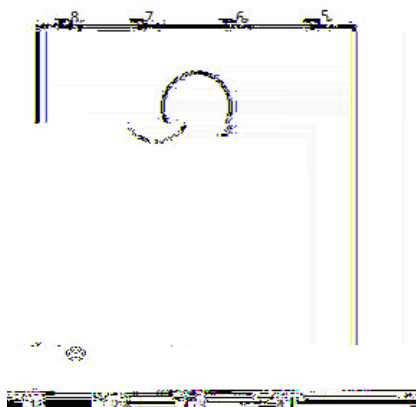
PDFN5 X6

Unit:mm



Rev.01 202209

/ Marking Instructions



200P03

Note

BR

() / 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 Boxes/Outer BUP	