

BRCs050N03YB

Rev.A May.-2023



DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	55	A
Drain Current - Pulsed	I_{DM}	145	A
Gate-Source Voltage	V_{GSS}	± 20	V
Single Pulsed Avalanche Energy	E_{AS}	220.9	mJ
Avalanche Current	I_{AS}	23.5	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	30	W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to 150	

Junction-to-Ambient $t = 10$

R_{J-A}

Parameter	Symbol	Test Conditions	Min
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/ Electrical Characteristic Curve

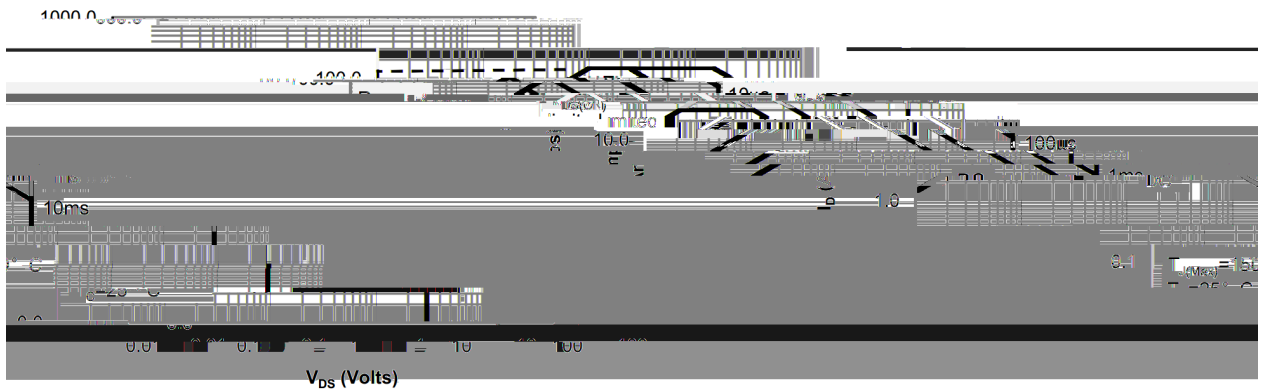
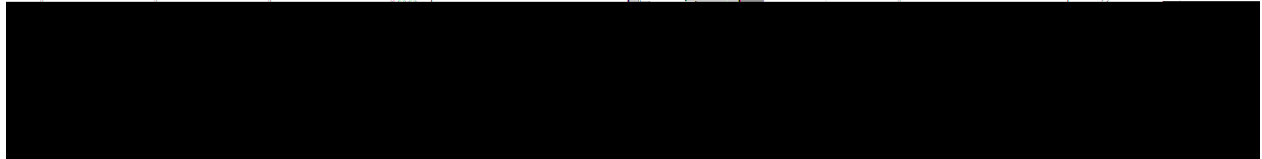
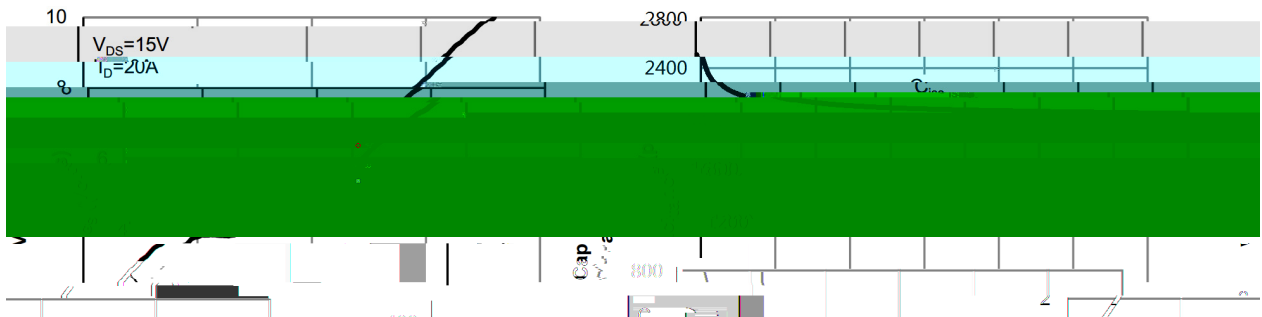
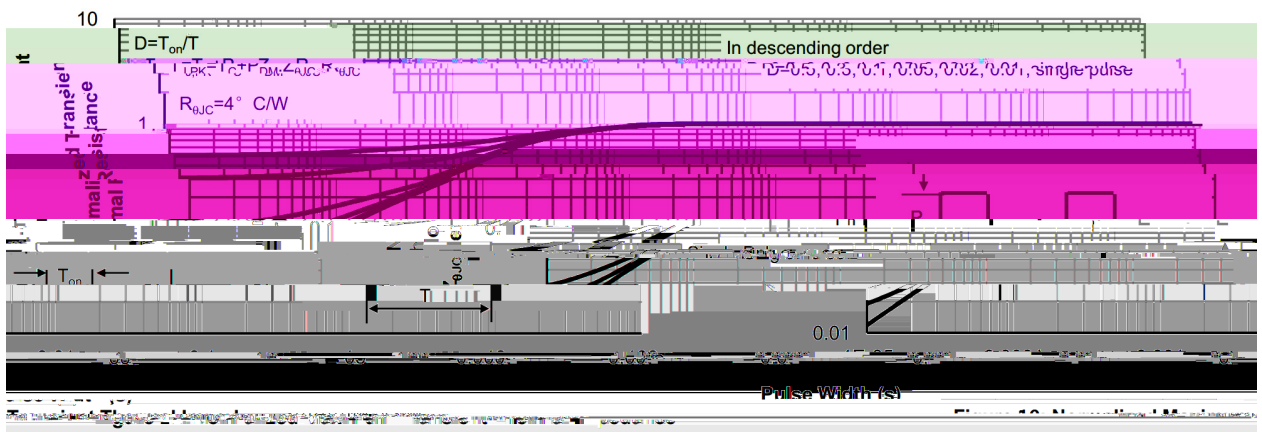


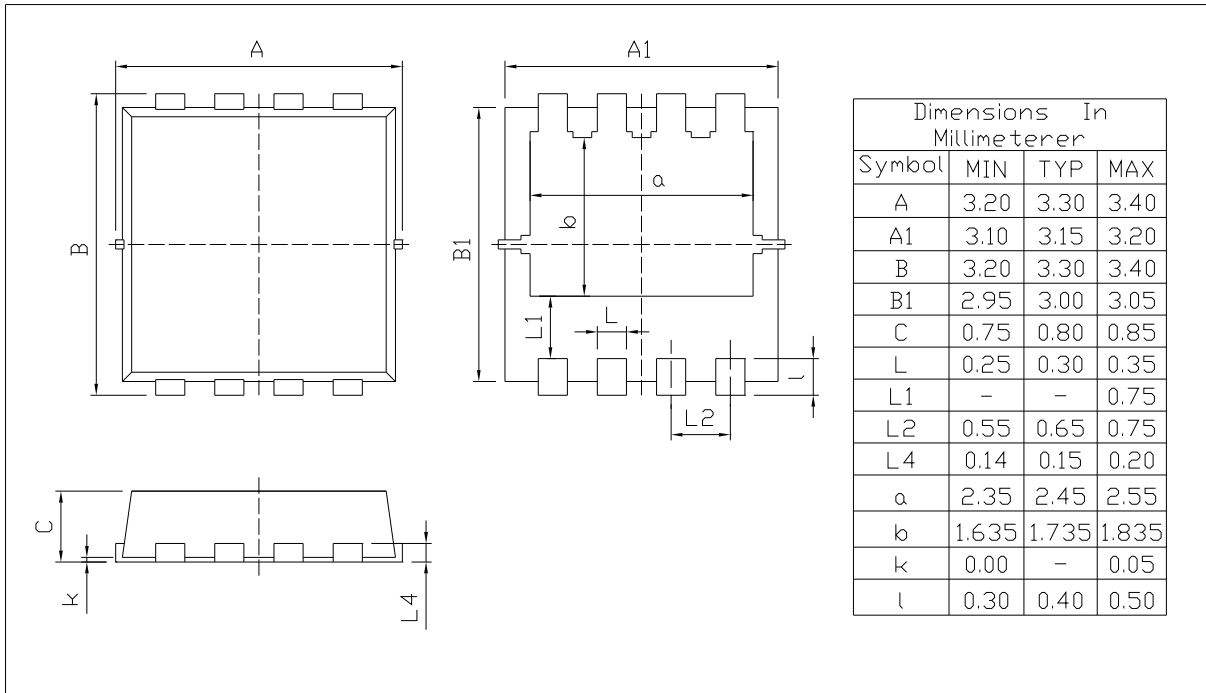
Fig. 10. Maximum Power Dissipation vs. Junction Temperature and Pulse Width



/ Package Dimensions

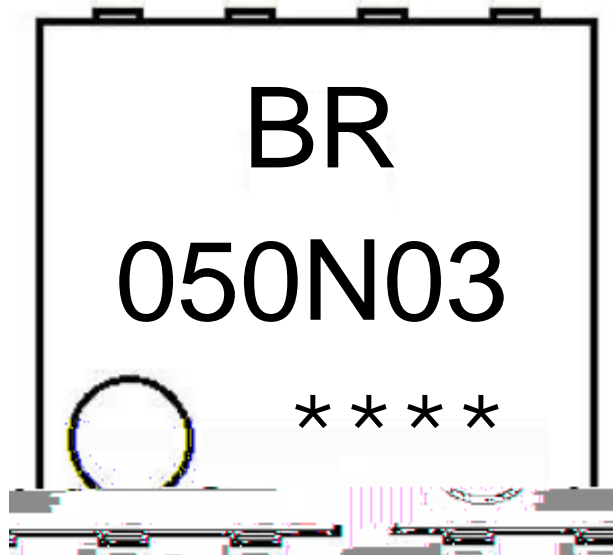
PDFN3X3A-8L

Unit:mm



Rev.00 202011

/ Marking Instructions



BR

050N03

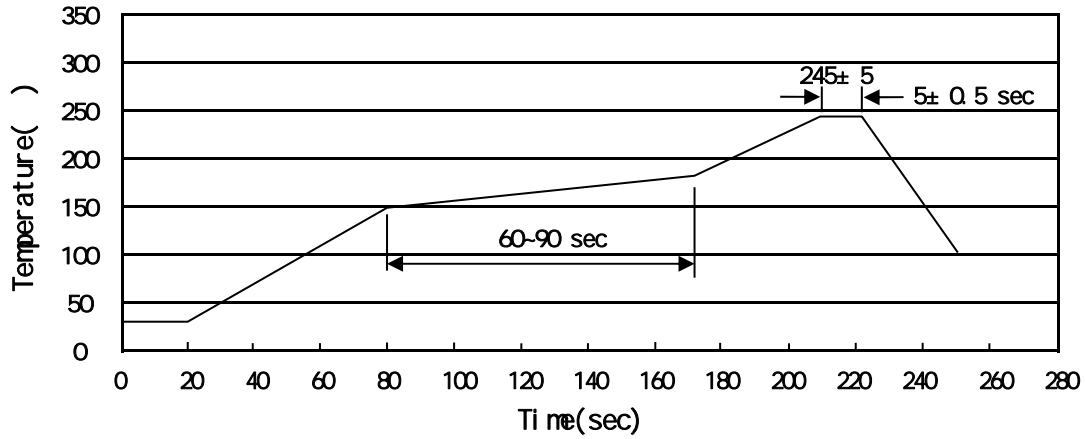
Note:

BR: Company Code

050N03: 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±0.5 | sec; | 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
PDFN3x3A-8L	5,000	2	10,000	6	60,000	13 x12	360x360x50	380x335x366

/ Notices