

BRC5035N04SZC

Rev.A Mar.-2024

/ Descriptions

PDFN5×6 N

N-Channel MOSFET in a PDFN5×6 Plastic Package.

/ Features

$V_{DS}(V)=40\text{ V}$ $I_D=98\text{ A}$

$R_{DS(ON)}@10\text{ V}$ 3.5m (Typ.3.0mR)

$R_{DS(ON)}@4.5\text{ V}$ 5.0m (Typ.4.0mR)

HF Product.

/ Applications

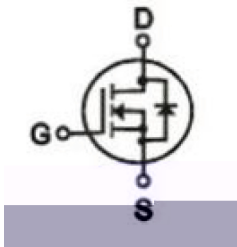
MB/NB/UMPC/VGA

Buck

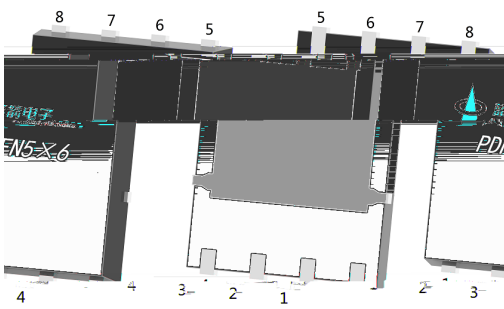
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Battery Management,High Frequency Point-of-Load Synchronous Buck Converter for MB/NB/UMPC/VGA,Networking DC-DC Power System,Load Switch.

/ Equivalent Circuit



/ Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

/ Marking

See Marking Instructions.

BRCS035N04SZC

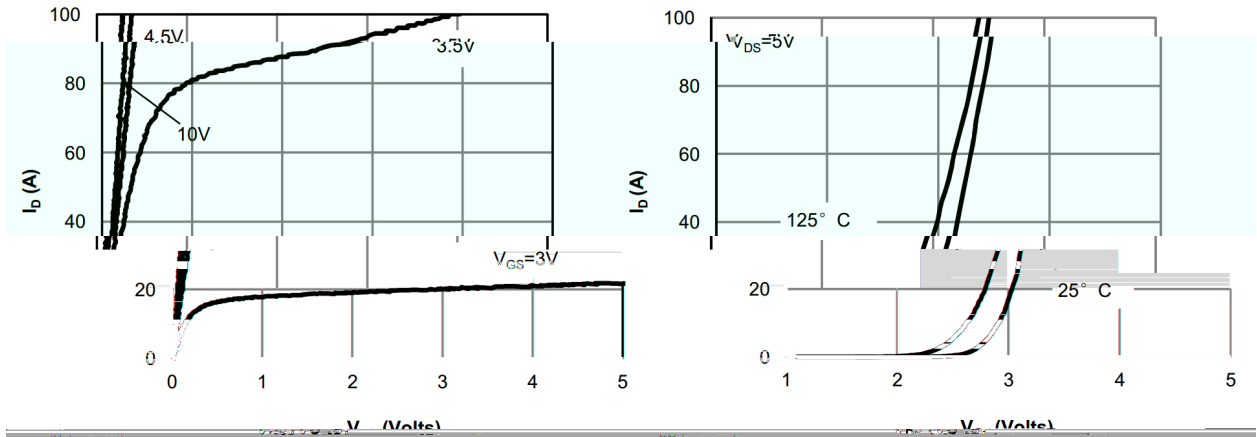
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DATA SHEET

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=20V$ $R_L=1$ $R_{GEN}=3$		11		ns
Turn-On Rise Time	t_r			11		
Turn-Off Delay Time	$t_{d(off)}$			40		
Turn-Off Fall Time	t_f			10		

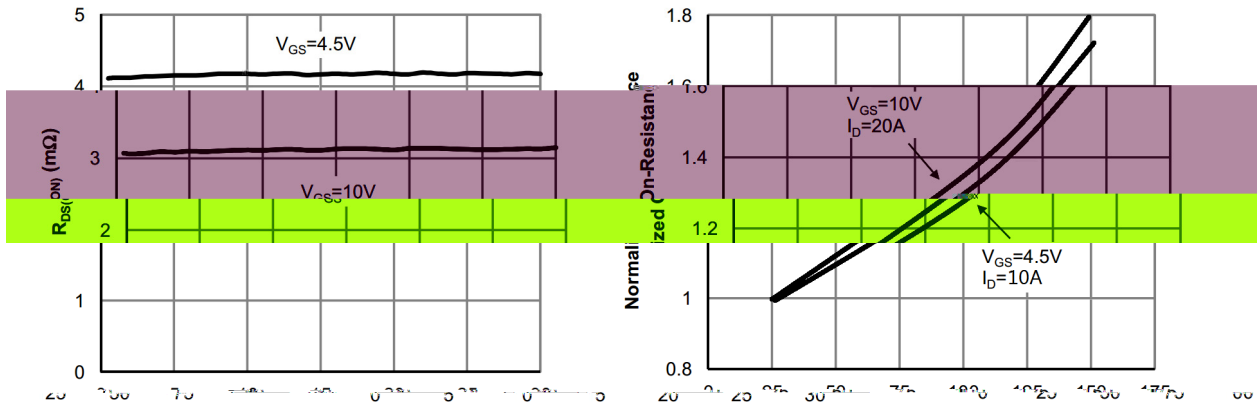
/ Electrical Characteristic Curve



On-Region Characteristics

Figure 2: Transfer Characteristics

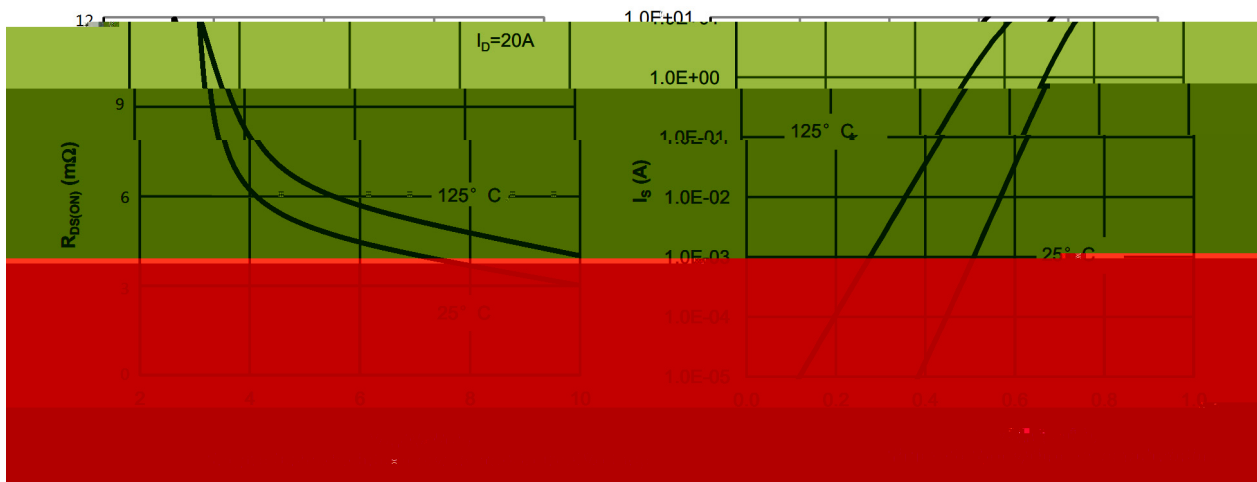
Figure 1:



(°C)
Function Temperature

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

Temperature
Figure 4: On-Resistance vs. Drain Current



/ Electrical Characteristic Curve

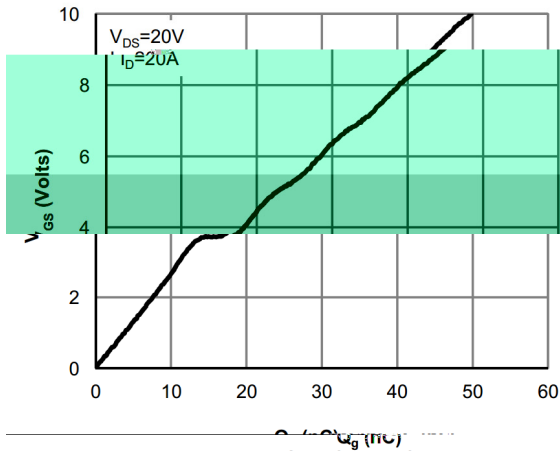


Figure 7: Gate-Charge Characteristics

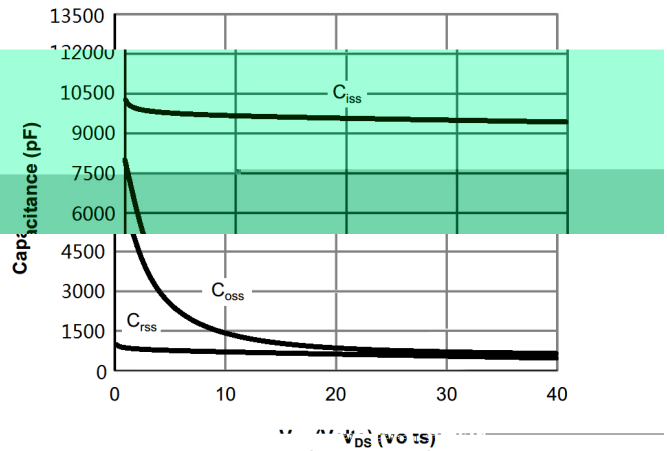


Figure 8: Capacitance Characteristics

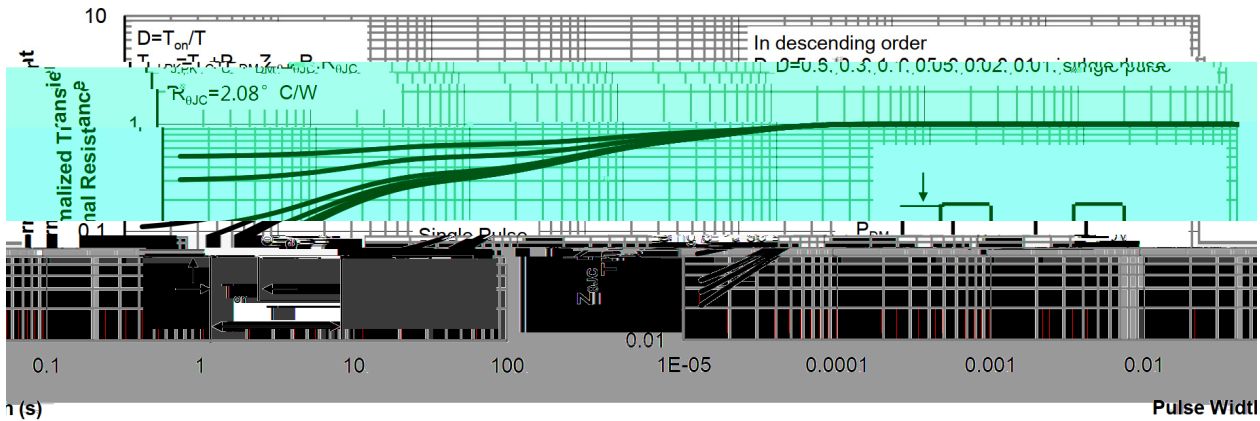
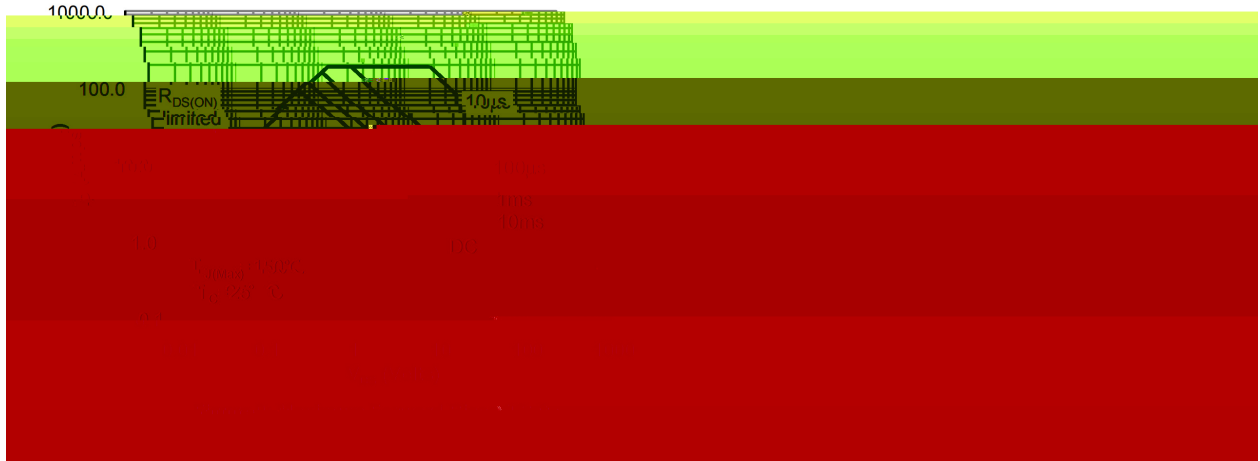
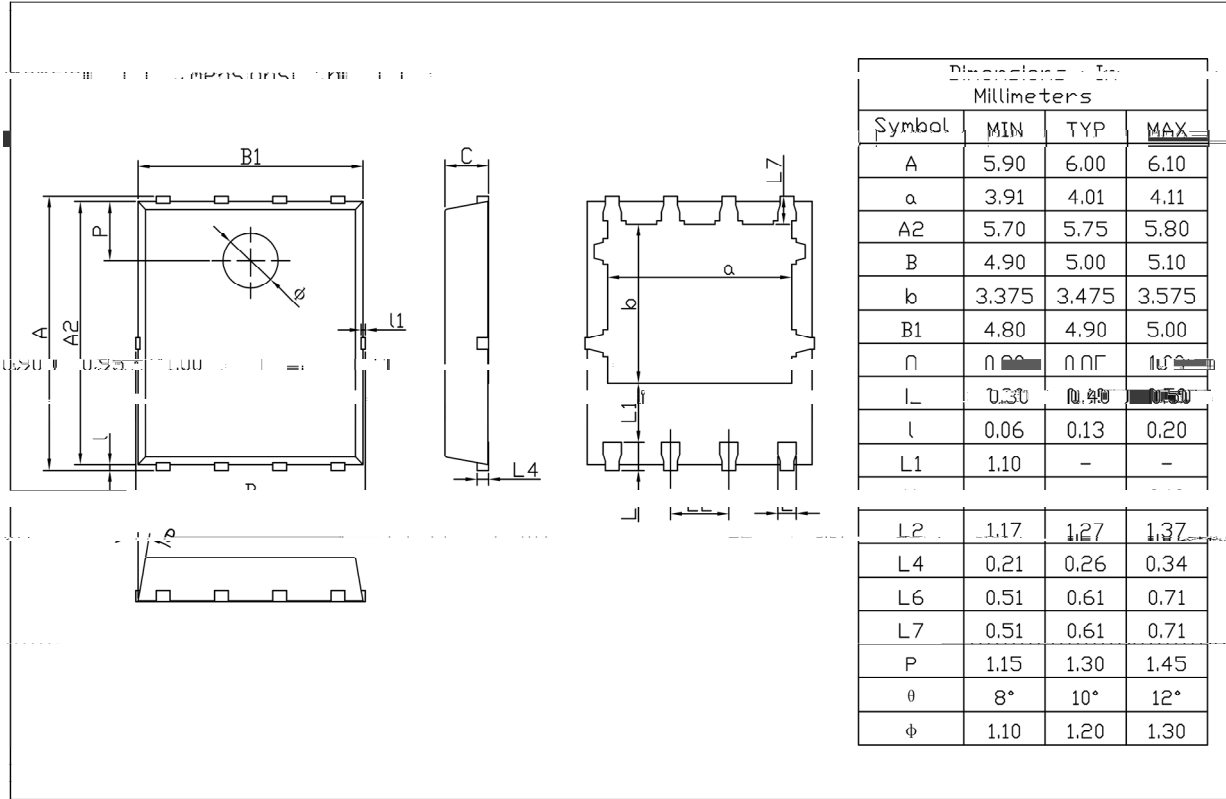


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

PDFN5 X6

Unit:mm



Rev.01 202209

/ Marking Instructions



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035N04S

Note

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Company Code

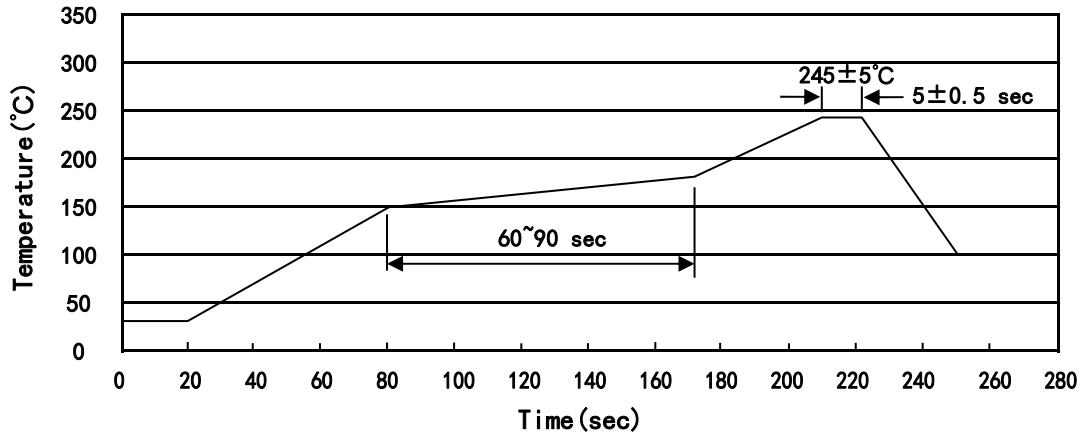
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Product Type Code

****:

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 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
PDFN5x6	5,000	2	10,000	6	60,000	13"x12	360x360x50	380x335x366

/ Notices