

BRCS015N04SZCQ

Rev.B Feb.-2023

/ Descriptions

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

/ Features

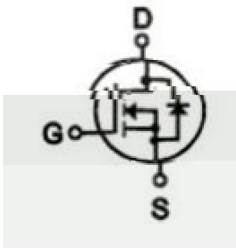
AEC-Q101

Low $R_{DS(ON)}$ to minimize conductive loss; low Gate Charge for fast switching; Low Thermal resistance; Qualified to AEC-Q101 Standards for High Reliability; HF Product.

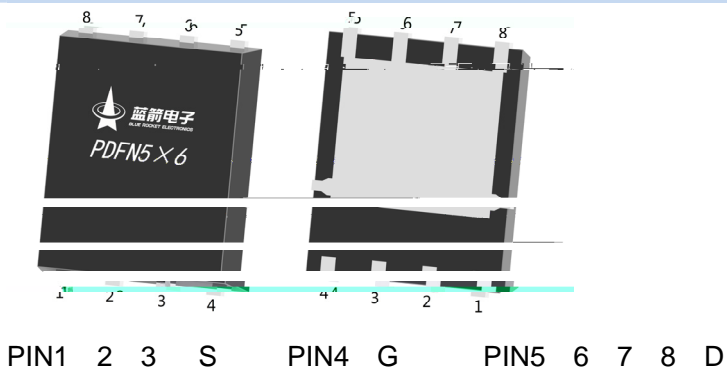
/ Applications

Battery Management, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



/ Marking

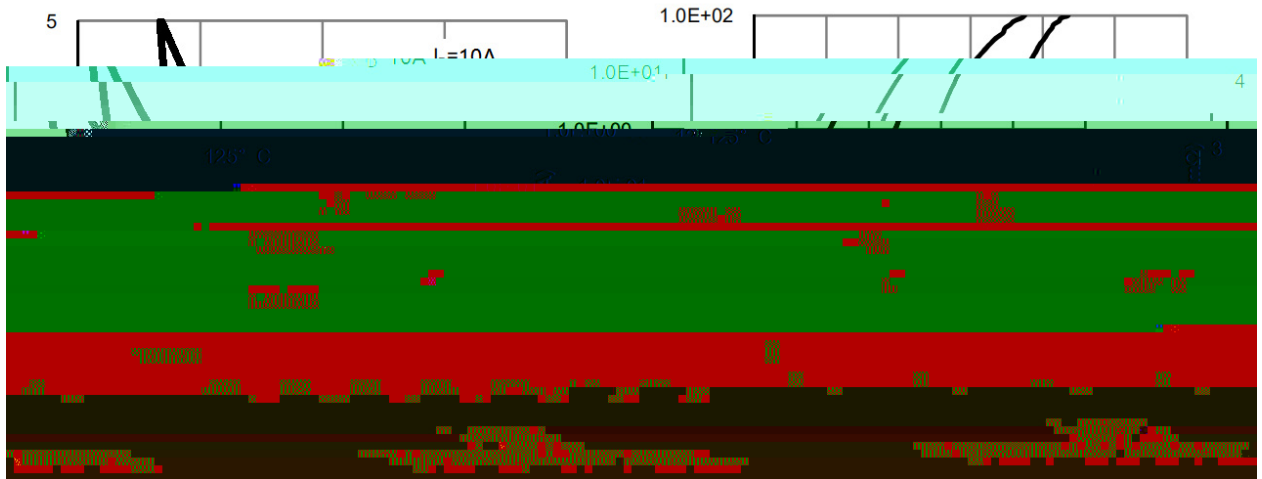
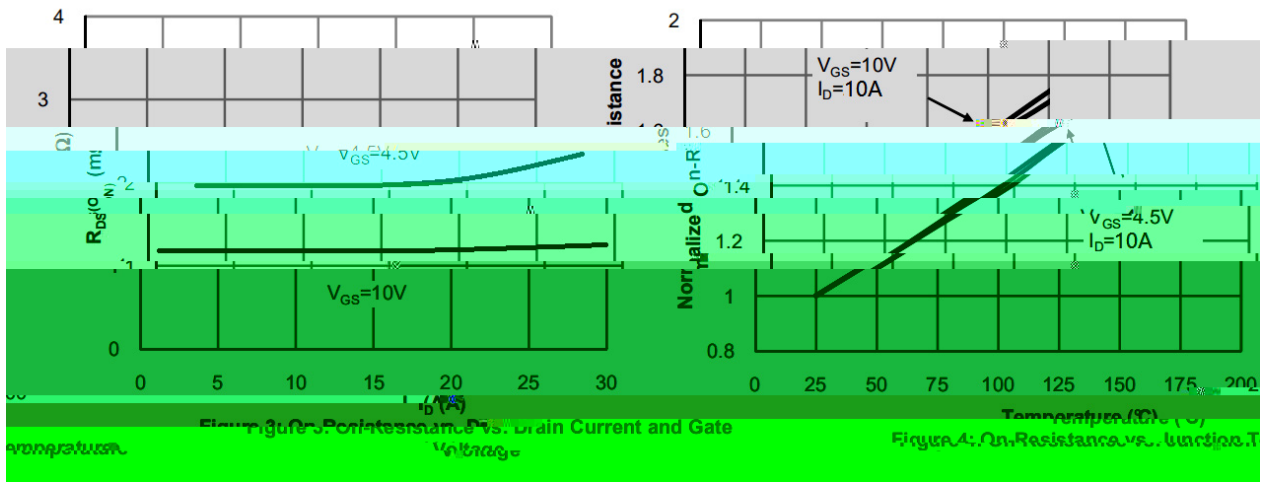
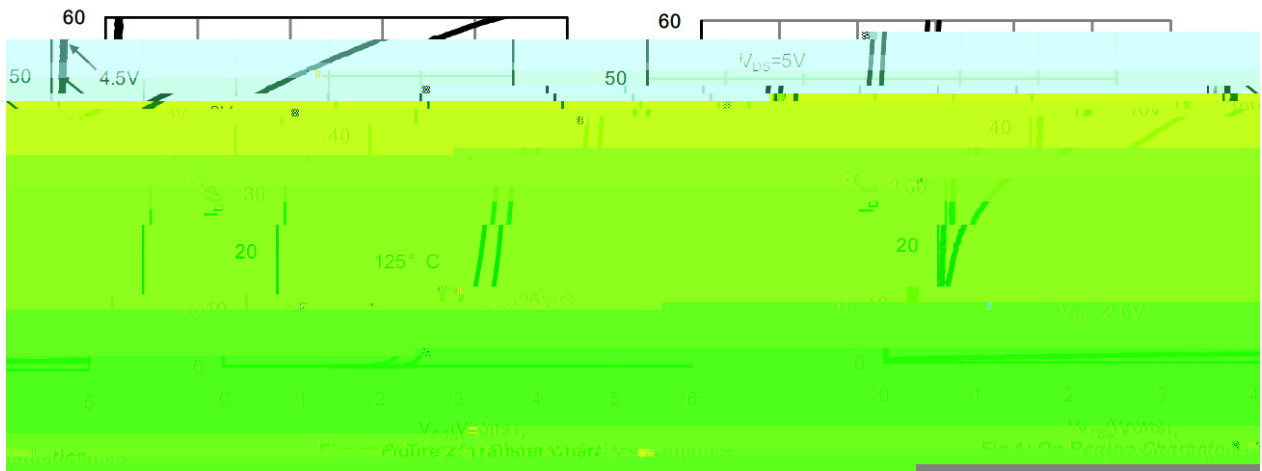
See Marking Instructions.

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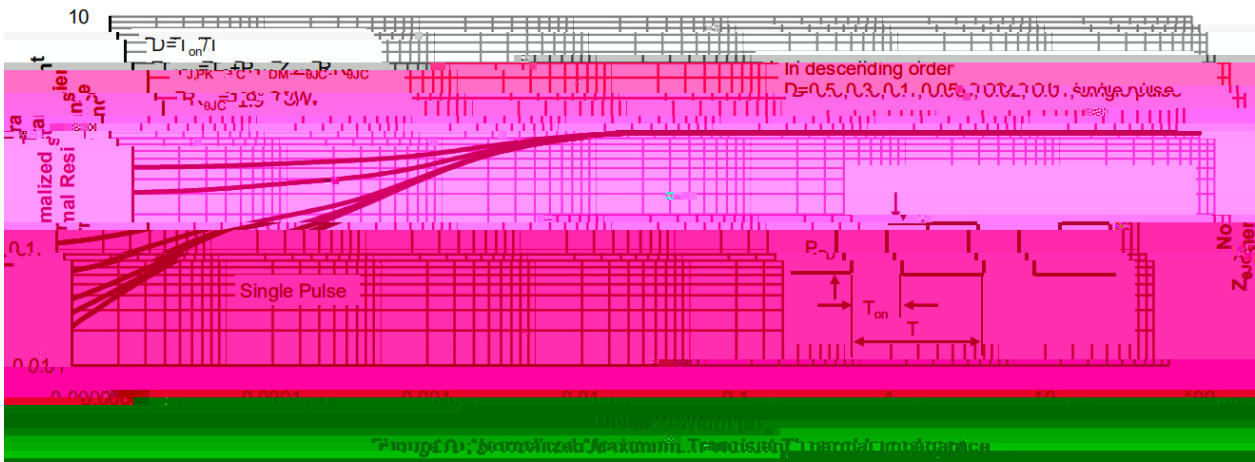
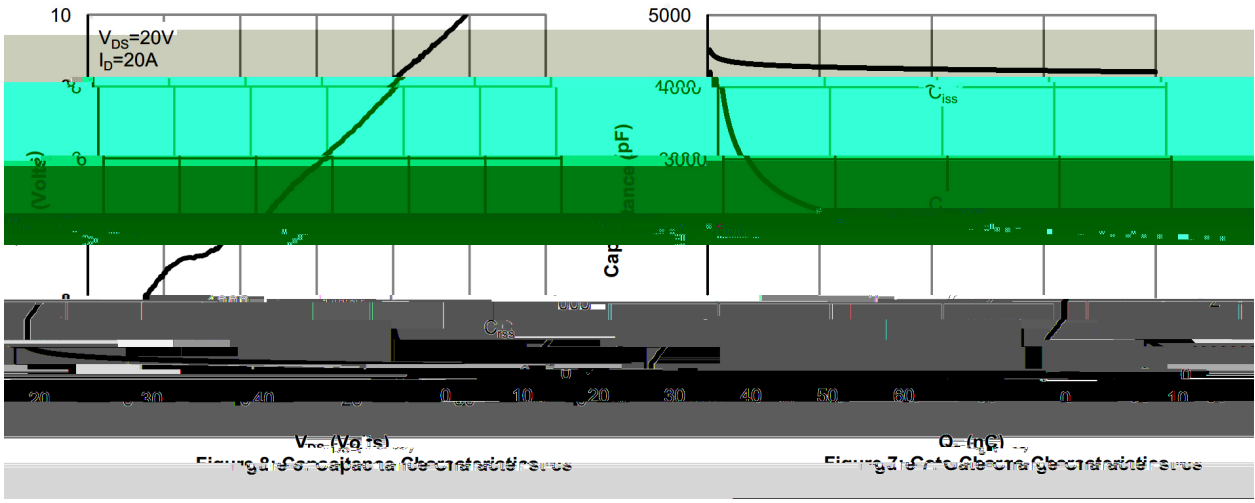
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Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Drain Current - Continuous	I_D	170	A
Drain Current – Pulsed	I_{DM}	340	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	65	W
Single Pulse Avalanche Energy(L=0.5mH)	E_{AS}	358	mJ
Avalanche Current(L=0.5mH)	I_{AS}	32	A
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 150	
Thermal resistance, junction - case	R_{JC}	1.9	/ W
Thermal resistance, junction - ambient	R_{JA}	/ W	

/ Electrical Characteristic Curve



/ Electrical Characteristic Curve

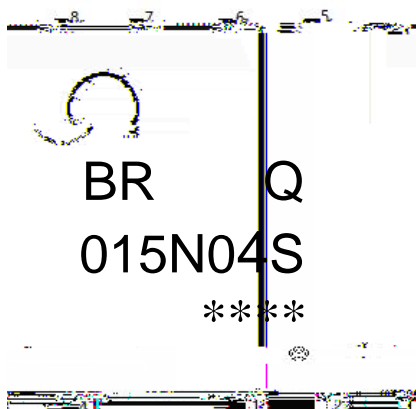


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DATA SHEET

/ Marking Instructions



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015N04S

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Note

BR Company Code

Q: Automobile halogen-free product Code

015N04S Product Type

****: Lot No. Code, code change with Lot No

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

Note:

- | | | | |
|---|-----------|--------------|---|
| 1 | 150 ~ 200 | 60 ~ 120sec; | 1.Preheating:150~200 , Time:60~120sec. |
| 2 | 255±5 | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 | 2 ~ 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±