

/ Revised record

版本	修订日期	有修订的页码	修订涉及的内容	拟制	审核
A	2022.05.09	All	参考 ZY-JMM4719N 与 AOS-AON6500 规格书首次制定	庞隆基	陈逸晞

/ Descriptions

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

/ Features

Low $R_{DS(ON)}$ to minimize conductive loss;low Gate Charge for fast switching;Low Thermal resistance;HF Product.

/ Applications

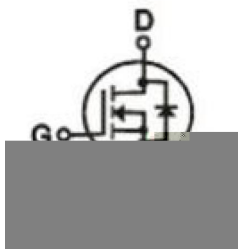
MB/NB/UMPC/VGA

Buck

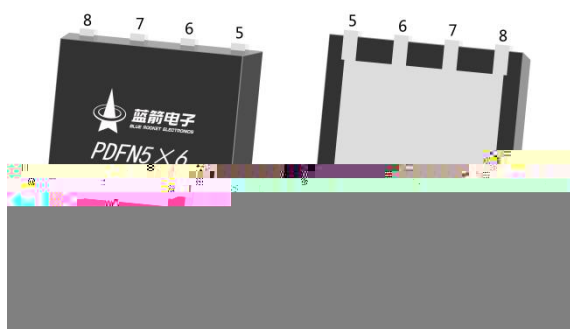
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Battery Management,High Frequency Point-of-Load Synchronous Buck Converter for MB/NB/UMPC/VGA,Networking DC-DC Power System,Load Switch.

/ Equivalent Circuit



/ Pinning



PIN1、2、3: S PIN4: G PIN5、6、7、8: D

/ Marking

见印章说明。 See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Drain Current - Continuous	I_D	370	A
Drain Current – Pulsed	I_{DM}	800	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	208	W
Single Pulse Avalanche Energy(L=0.1mH)	E_{AS}	181	mJ
Avalanche Current(L=0.1mH)	I_{AS}	42	A
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 150	$^\circ\text{C}$

Thermal resistance, junction to ambient;

junction to case;

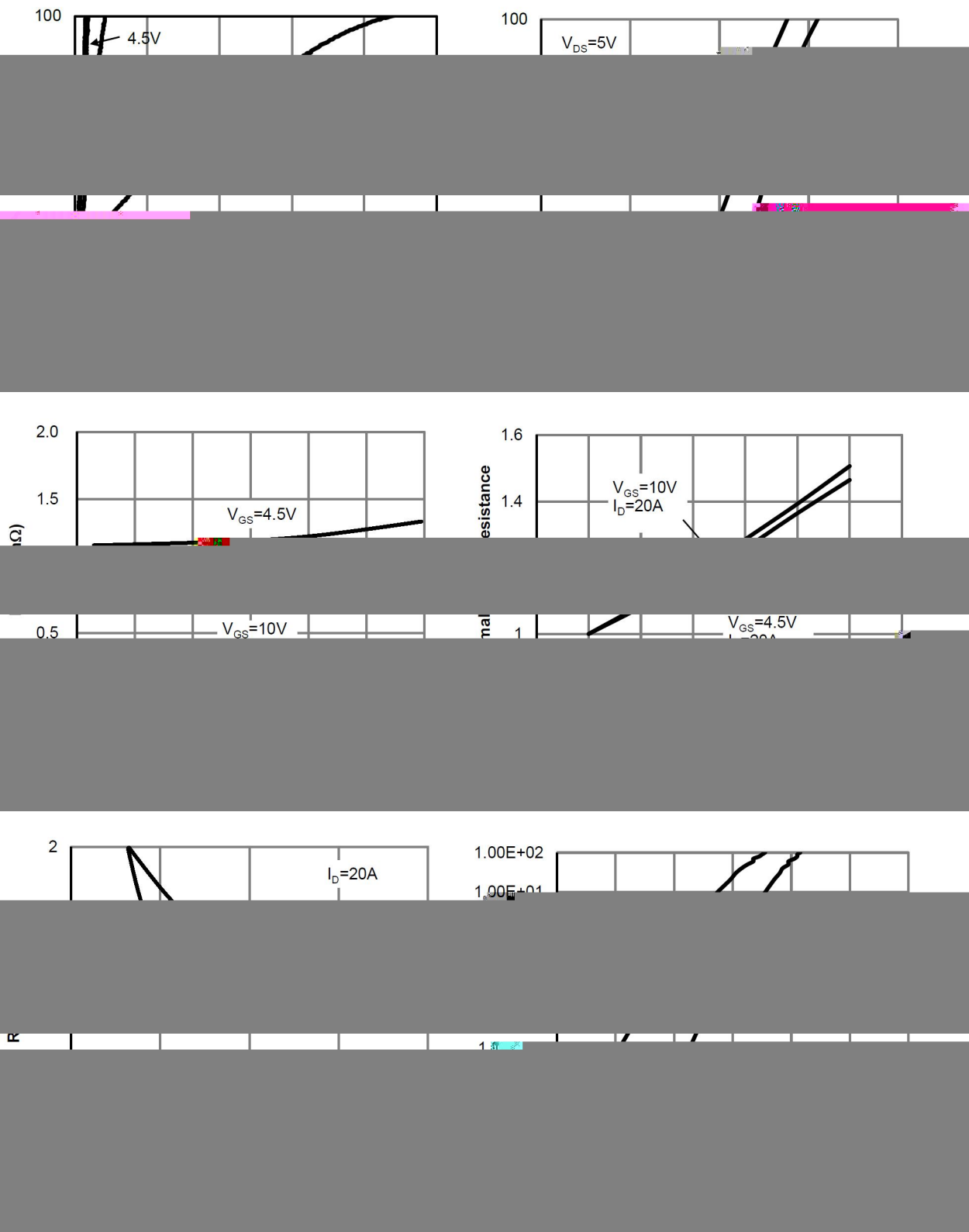
junction to lead;

junction to solder;

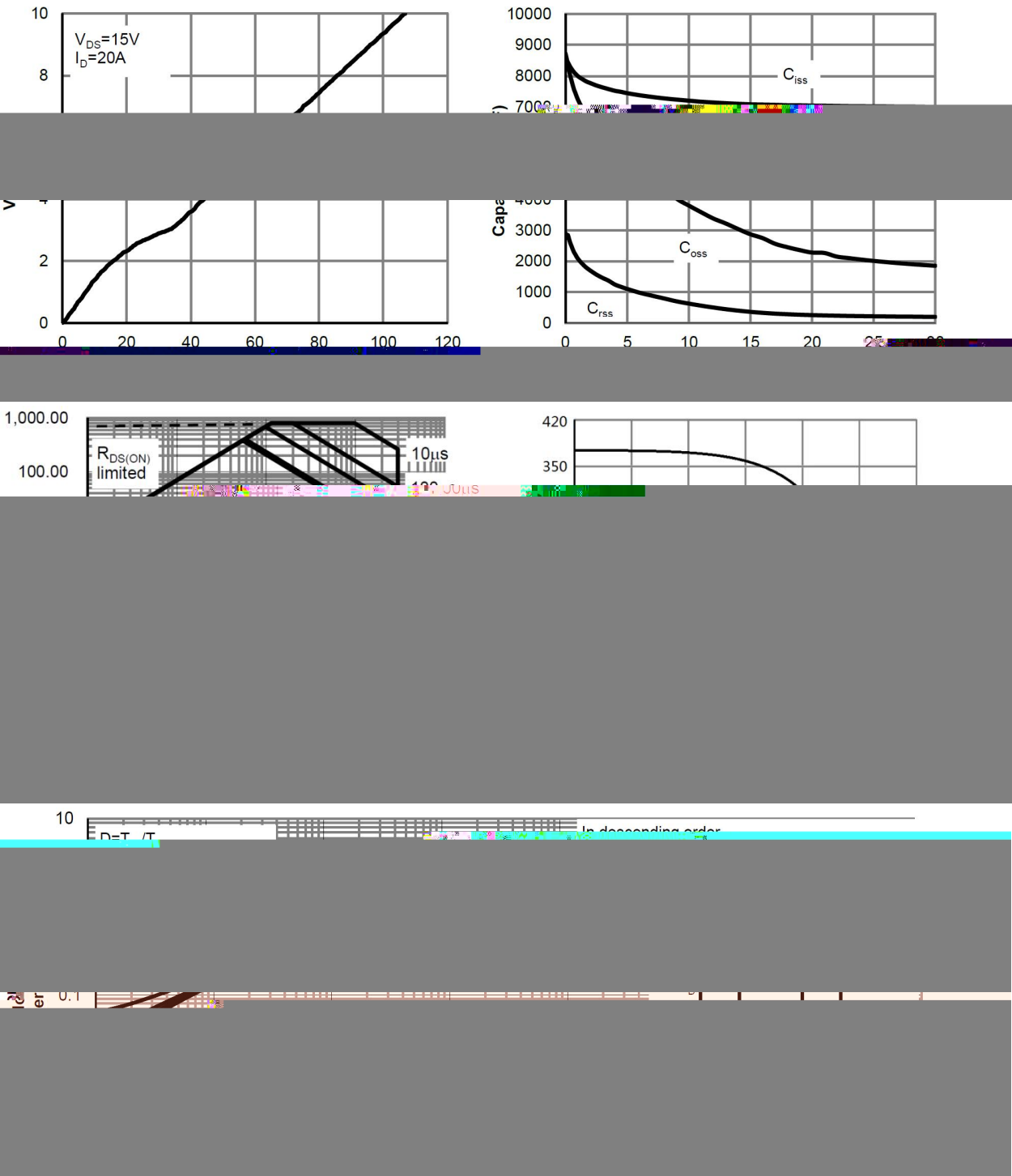
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=15V$ $R_L=0.75\Omega$ $R_{GEN}=3\Omega$		12.3		ns
Turn-On Rise Time	t_r			12.8		
Turn-Off Delay Time	$t_{d(off)}$			68.5		
Turn-Off Fall Time	t_f			28.8		

Electrical Characteristic Curve



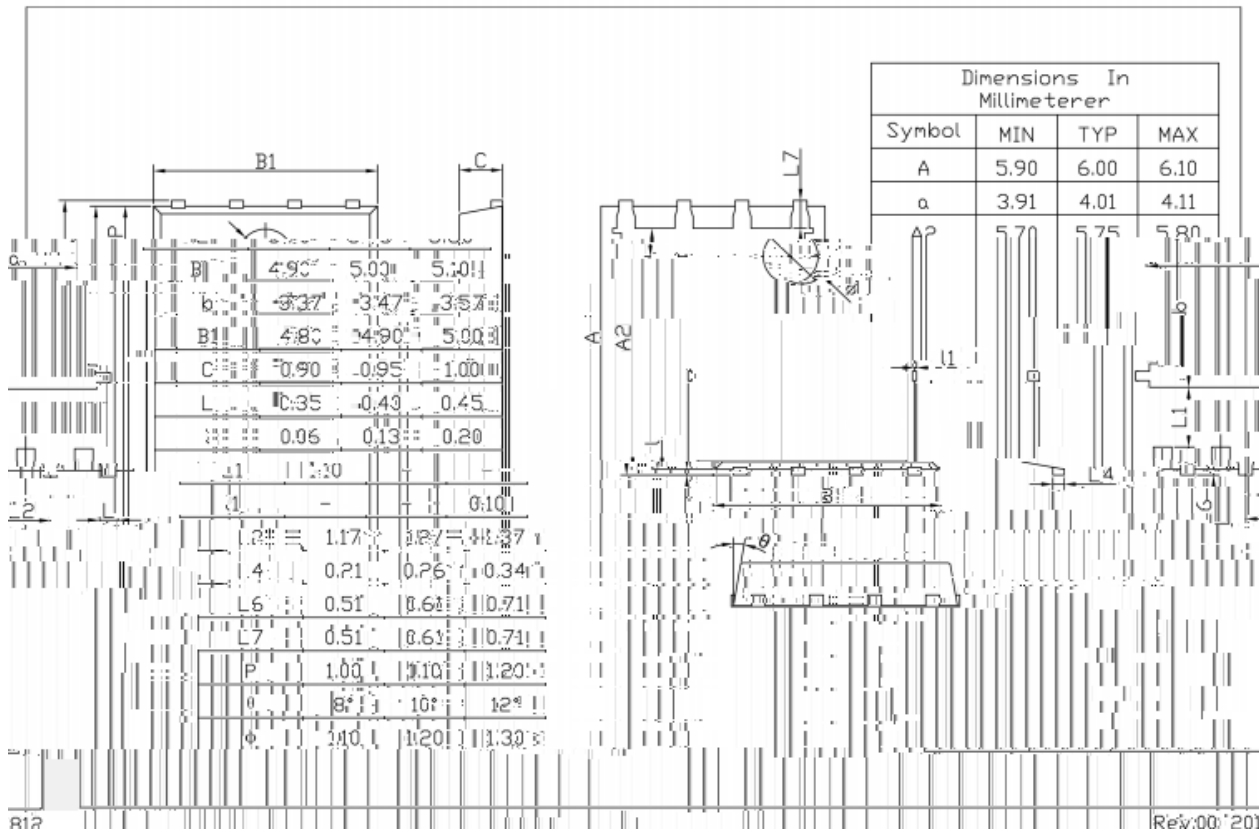
/ Electrical Characteristic Curve



/ Package Dimensions

PDFN5 X6

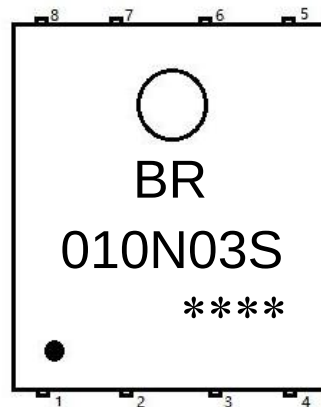
Unit:mm



R12

Rev:00:201

/ Marking Instructions



010N03S

Note

BR

Company Code

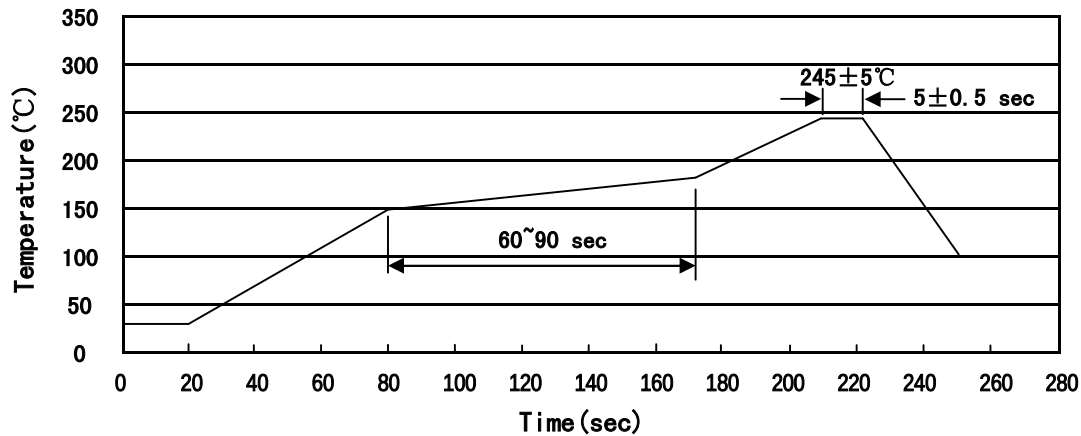
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Product Type

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Lot No. Code, code change with Lot No

() /



Note:

- | | | | | | |
|---|-------|-----|----|-----------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | | | 2 | 10°C/sec. | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
PDFN5 × 6	5000	2	10000	6	60000	13" × 12	360 × 360 × 50	380 × 335 × 366

/ Notices