

/ Revised record

A	2022.5.6	All	AOS-AONS66916		
A	2022-6-9	all	Q AEC-Q101 Q 245±5°C 5±0.5sec 255±5°C 5±0.5sec		

/ Descriptions

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

/ Features

AEC-Q101

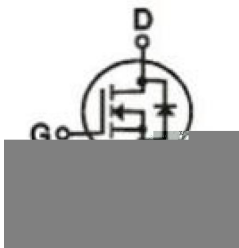
Low $R_{DS(ON)}$ to minimize conductive I_{loss} ;low Gate Charge for fast switching;Low Thermal resistance;
Qualified to AEC-Q101 Standards for High Reliability; HF Product.

/ Applications

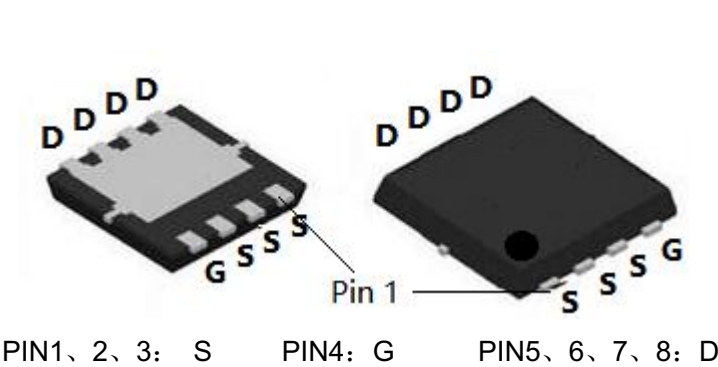
MB/NB/UMPC/VGA Buck -

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

/ Equivalent Circuit



/ Pinning



Pin	极性
1	S
2	S
3	S
4	G
5	D
6	D
7	D
8	D

/ Marking

See Marking Instructions.



参数 Parameter		符号 Symbol	数值 Rating	单位 Unit
Drain-Source Voltage		V _{DS}	100	V
Drain Current - Continuous		I _D	168	A
Drain Current – Pulsed		I _{DM}	400	A
Gate-Source Voltage		V _{GS}	±20	V
Power Dissipation		P _D (T _c =25℃)	215	W
Single Pulse Avalanche Energy(L=0.5mH)		E _{AS}	563	mJ
Avalanche Current(L=0.5mH)		I _{AS}	37.5	A
Junction and Storage Temperature Range		T _J , T _{stg}	-55 to 150	℃
Thermal resistance, junction - ambient	t ≤ 10s	R _{θJA}	20	℃/ W
	Steady-State		50	
Thermal resistance, junction - case	Steady-State	R _{θJC}	0.58	

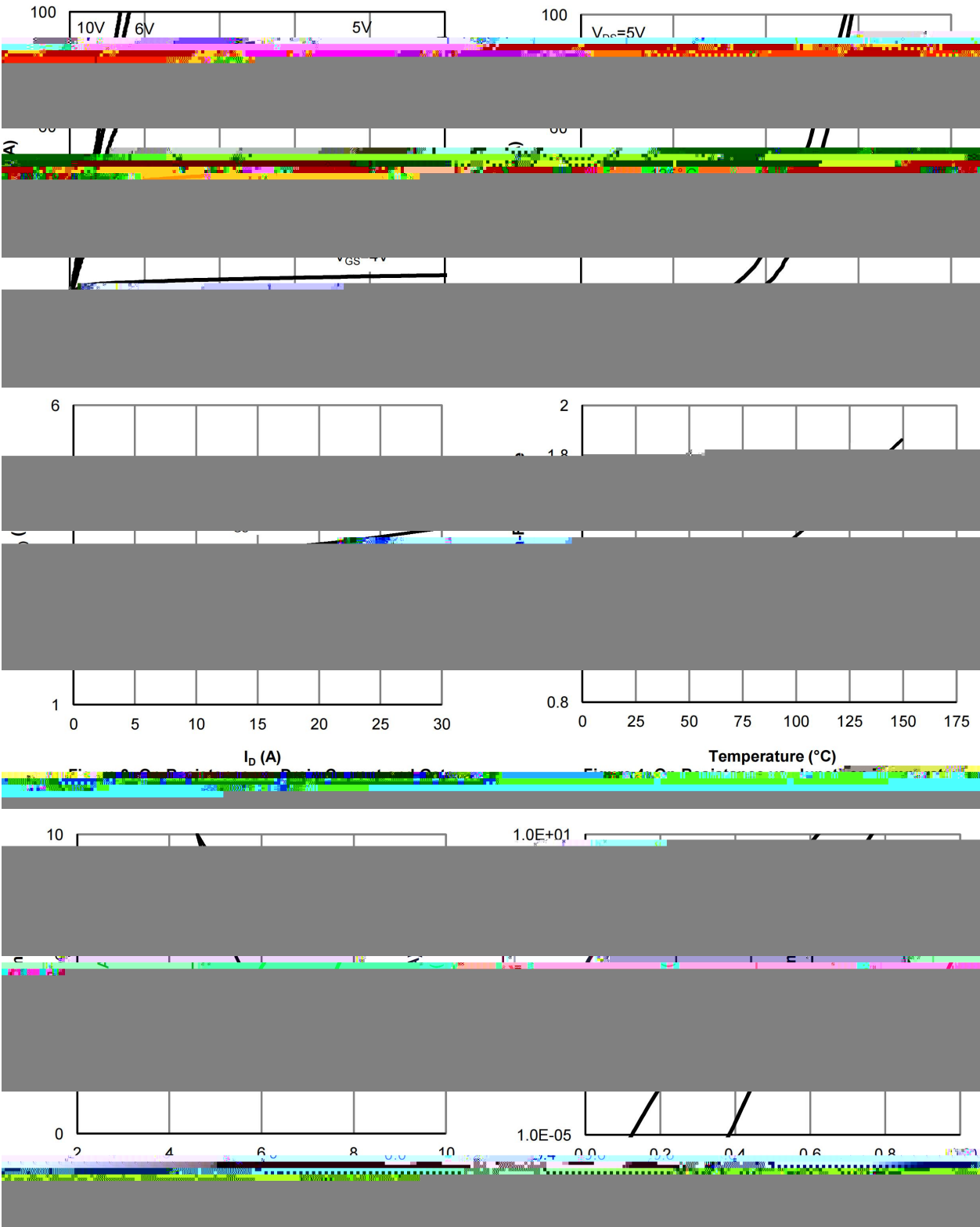
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max
Drain-Source Breakdown Voltage	B_{DSS}	$V_{GS}=0\text{V}, I_D=-10\text{mA}$	100	112	V

BRCS035N10SHZCQ

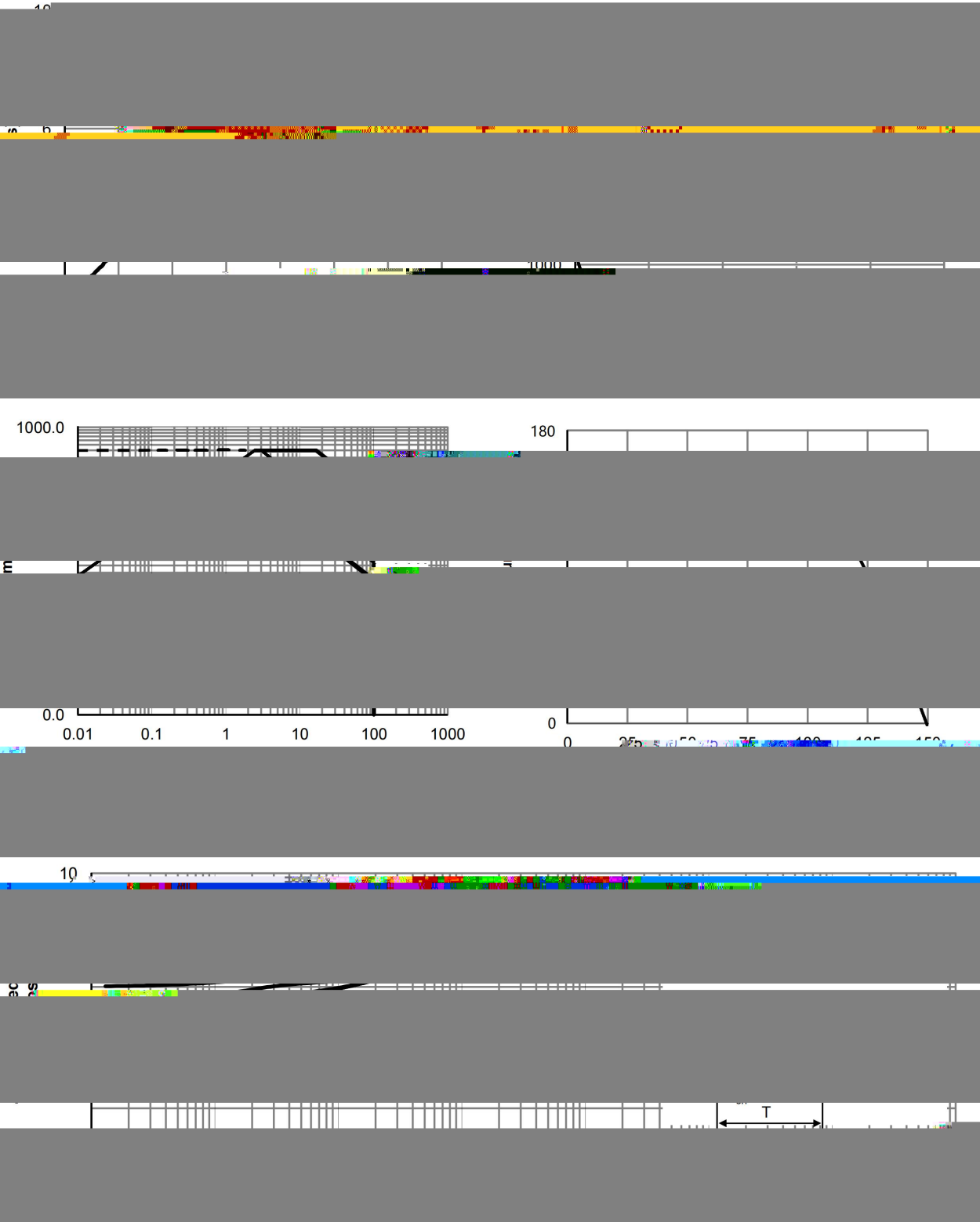
Rev.A Jun.-2022

DATA SHEET

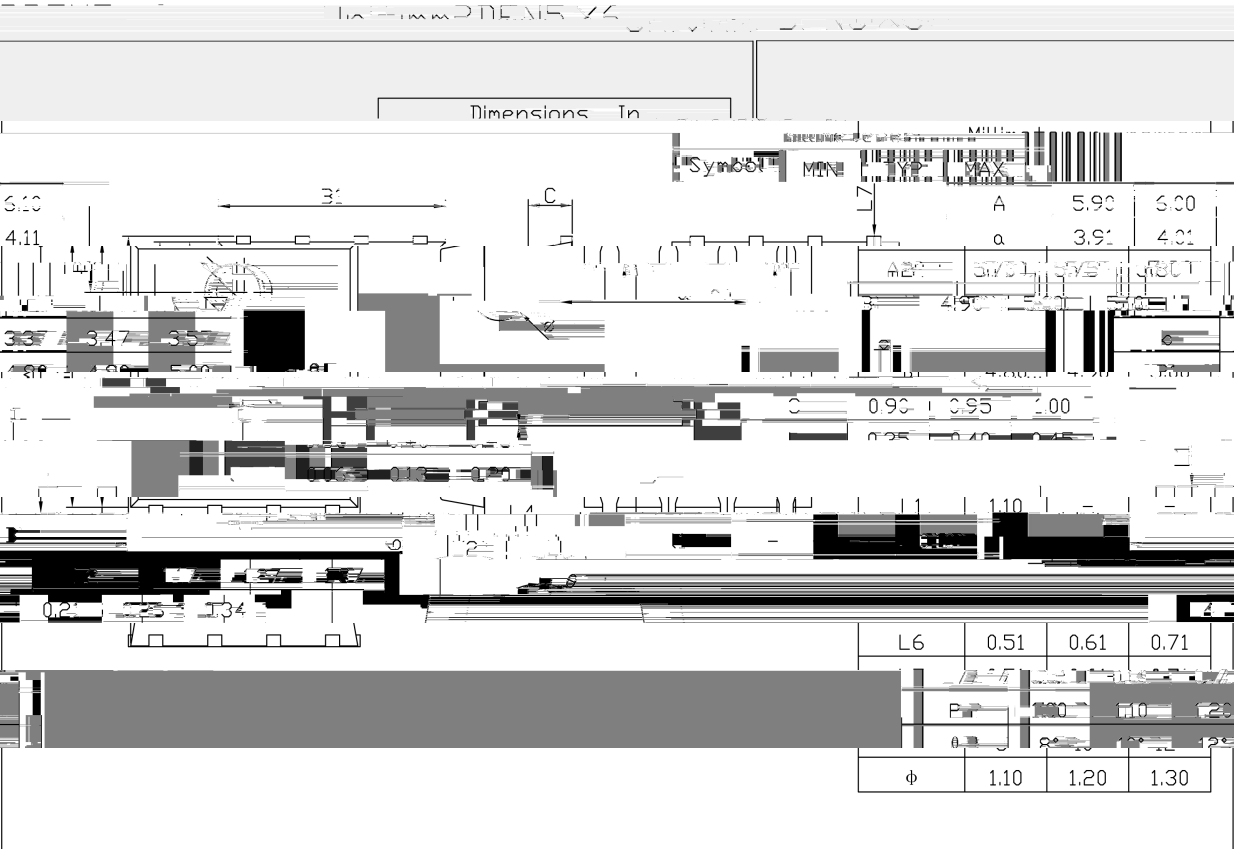
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve

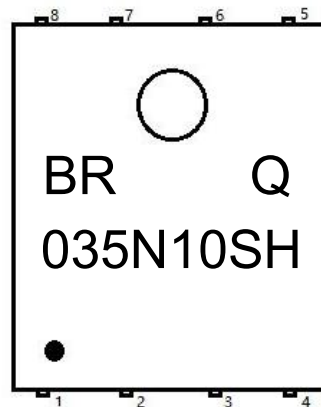


/ Package Dimensions



Rev.00 201812

/ Marking Instructions



说明：

BR： 为公司代码

Q： 为汽车无卤产品标识

035N10SH： 为产品型号

****： 为生产批号代码，随生产批号变化

Note:

BR: Company Code

Q: Automobile halogen-free product Code

035N10SH: 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 Hea