



/ 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	2022.08.08	ALL	基于 AOS-AOB66916L 首次创建产品规格书	庞隆基	陈逸晞

/ Descriptions

TO-263 塑封封装 N 沟道场效应管。

N-CHANNEL MOSFET in a TO-263 Plastic Package.

/ Features

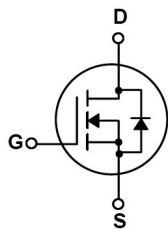
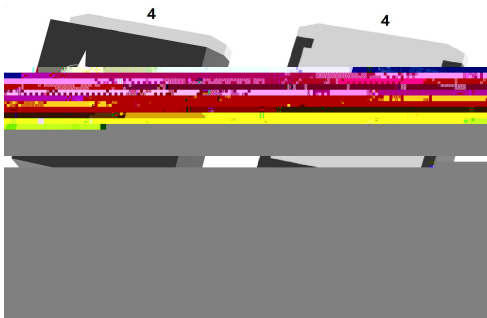
低电阻,开关速度快,无卤产品。

Ultra Low On-Resistance,fast switching,HF Product.

/ Applications

高频开关和同步整流、BMS、电机。

High frequency switching and synchronous rectification,BMS,Motor.

/ Equivalent Circuit**/ Pinning**

PIN1 : G

PIN 2、 4 : D

PIN 3 : S

/ Marking

见印章说明。 See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V _{DSS}	100	V
Drain Current		I _D (T _c =25℃)	180	A
Pulsed Drain Current		I _{DM}	385	A
Gate-Source Voltage		V _{GS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E _{AS}	563	mJ
Avalanche Current		I _{AS}	37.5	A
Total Power Dissipation		P _D (T _c =25℃)	237	W
Junction and Storage Temperature Range		T _J ,T _{STG}	-55 to 150	℃
Thermal Resistance-Junction to Ambient	t≤10s	R _{θJA}	17.7	℃/W
	Steady-State		70.7	
Thermal Resistance-Junction to Case	Steady-State	R _{θJC}	0.53	

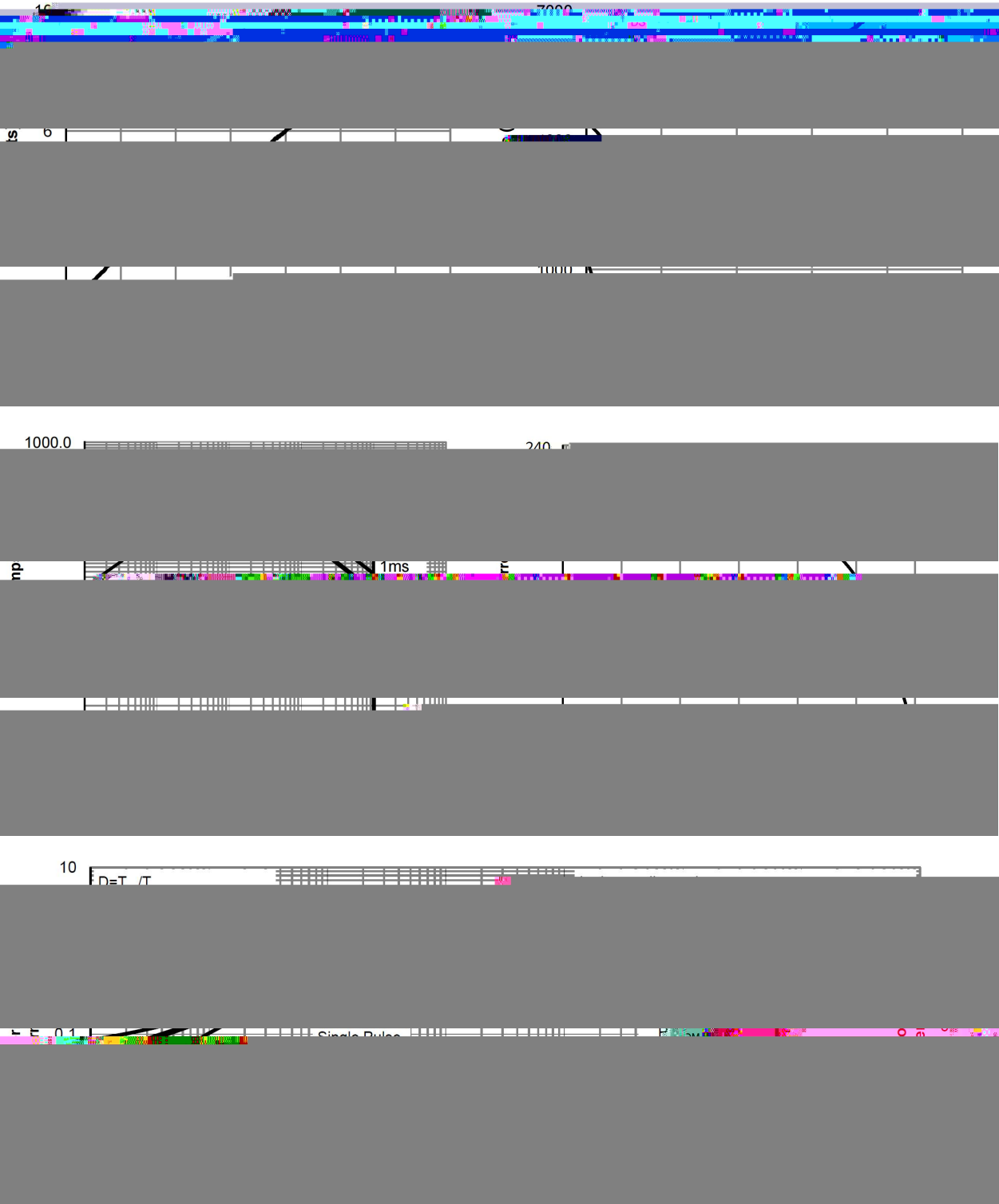
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0\text{V}$ $I_D=250\mu\text{A}$	100	112		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=100\text{V}$ $V_{GS}=0\text{V}$			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20\text{V}$ $V_{DS}=0\text{V}$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu\text{A}$	2	2.9	4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}$ $I_D=20\text{A}$		3.5	4.0	m Ω

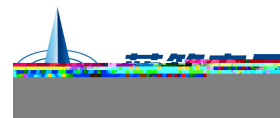


/ Electrical Characteristics(Ta=25)

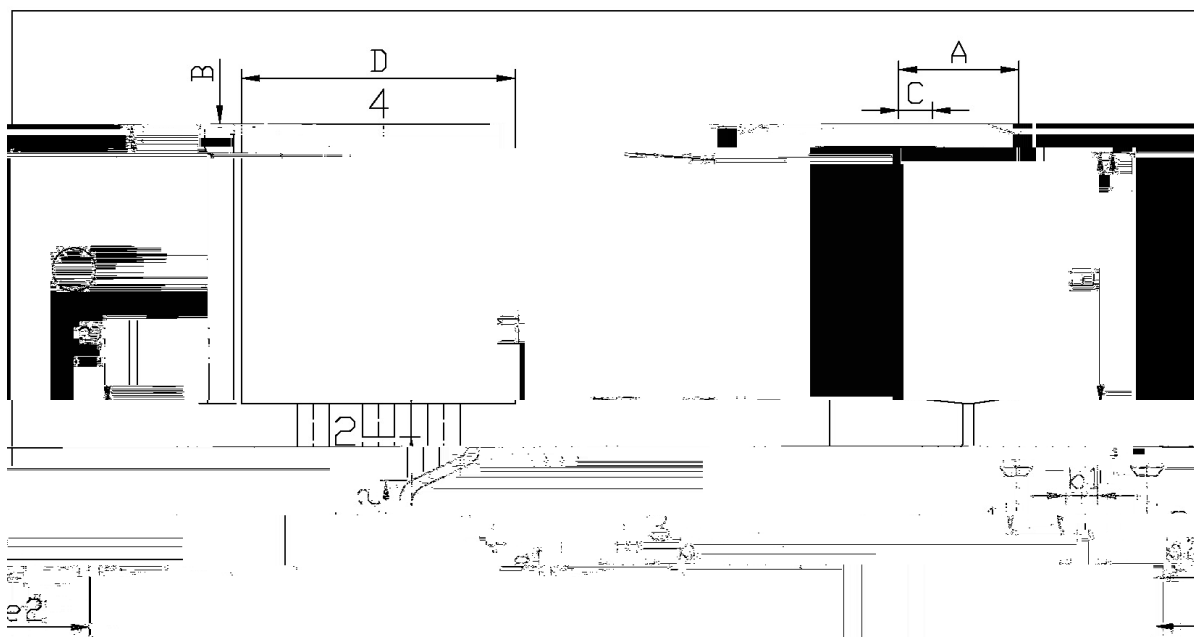
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=2.5\Omega$ $R_{GEN}=3\Omega$		25		ns
Turn-On Rise Time	t_r			17		
Turn-Off Delay Time	$t_{d(off)}$			53		
Turn-Off Fall Time	t_f			24		

/ Electrical Characteristic Curve





/ Package Dimensions

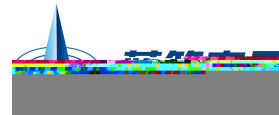


单位: mm

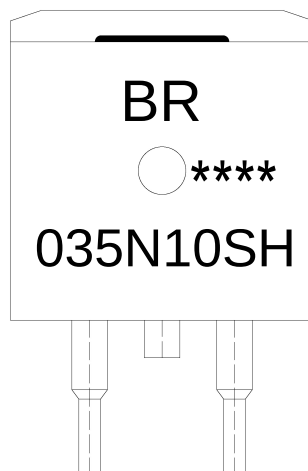
单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	e2	4.88	5.28
b1	1.15	1.35	L1	15.00	16.00
2.84	b2	0.40	0.60	L2	2.24
1.60	C	1.20	1.40	L3	1.20
n	9.80	10.20			

T2-253



/ Marking Instructions



BR

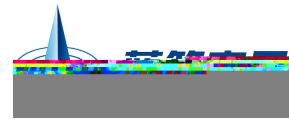
035N10SH

Note:

BR: Company Code

035N10SH: Product Type

****: 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°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 /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box 盒	Outer Box 箱
TO-263	800	1	800	6	4,800	13" ×24	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube 套管	Inner Box 盒	Outer Box 箱
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices