

BRCS150N10SRA

Rev.A Nov.-2021

A	2021.11.27	All	AOS-A

BRCS150N10SRA

Rev.A Nov.-2021

/ Descriptions

TO-220 N
N-CHANNEL MOSFET in a TO-220 Plastic Package.

/ Features

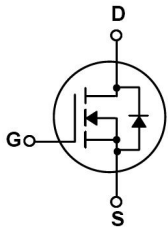
Ultra Low On-Resistance,fast switching.

/ Applications

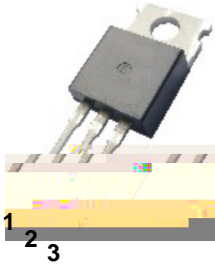
PFC

These devices are well suited for high efficient switched mode power supplies, Active power factor correction, electronic lamp ballast based on half bridge topology.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 4 D PIN 3 S

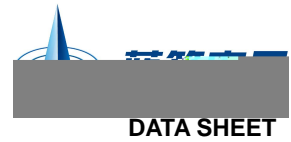
/ Marking

See Marking Instructions.

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⌘ / Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=2.5$ $R_{GEN}=3$		7		ns
Turn-On Rise Time	t_r			3		
Turn-Off Delay Time	$t_{d(off)}$			27		
Turn-Off Fall Time	t_f			4		

性 / Electrical Characteristic Curve

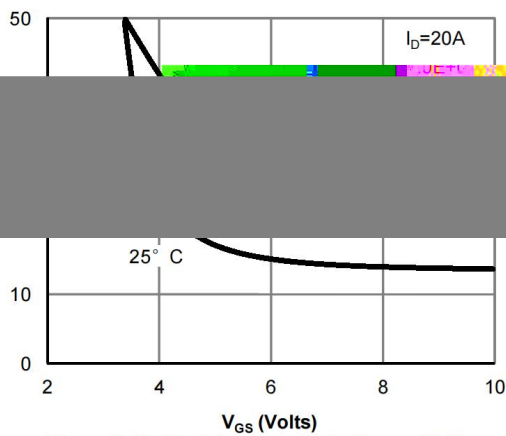
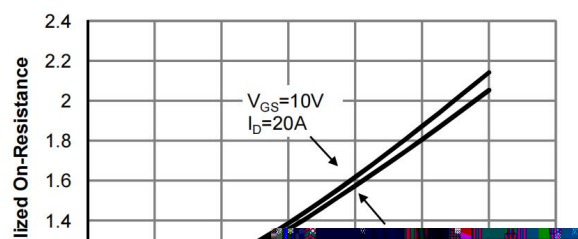
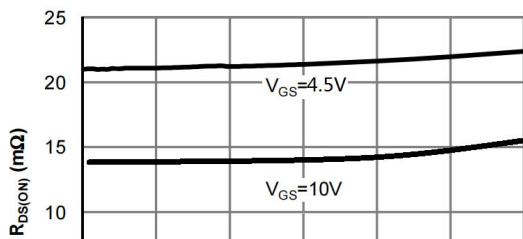
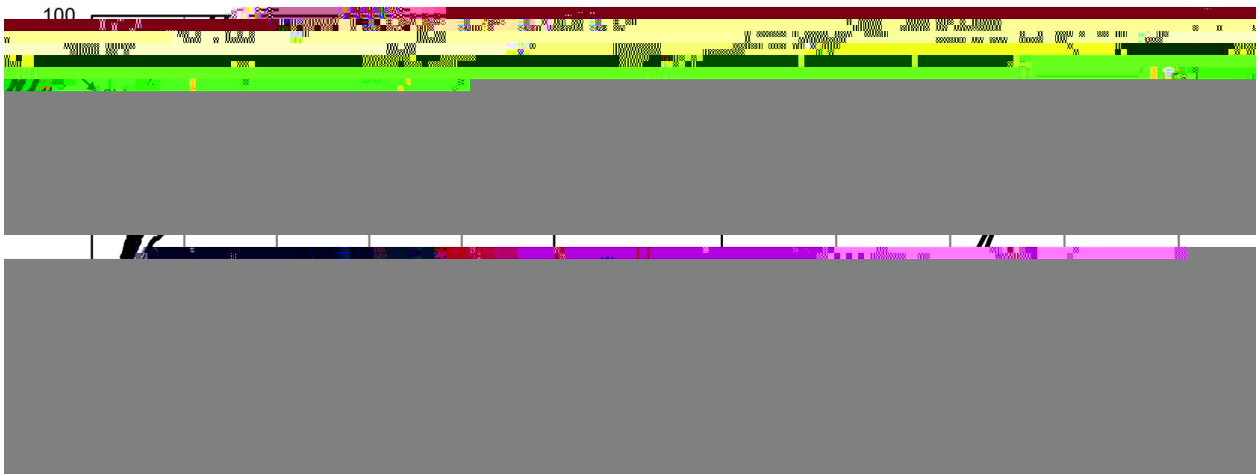


Figure 5: On-Resistance vs. Gate-Source Voltage

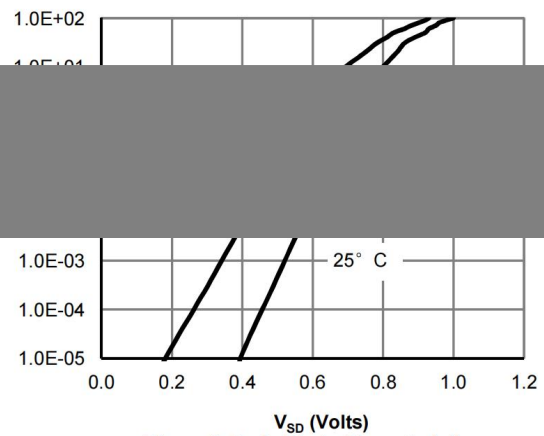


Figure 6: Body-Diode Characteristics

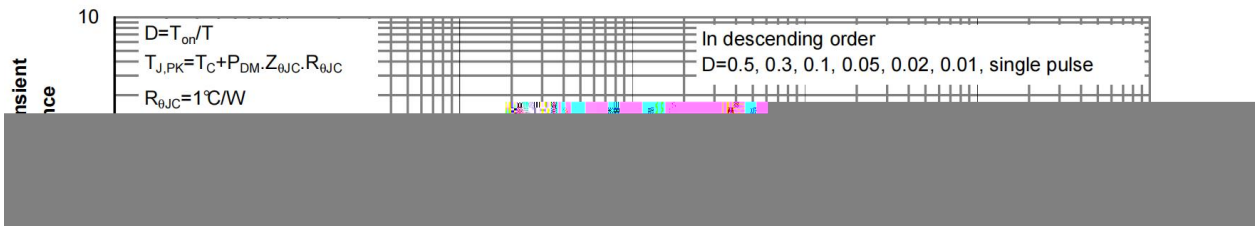
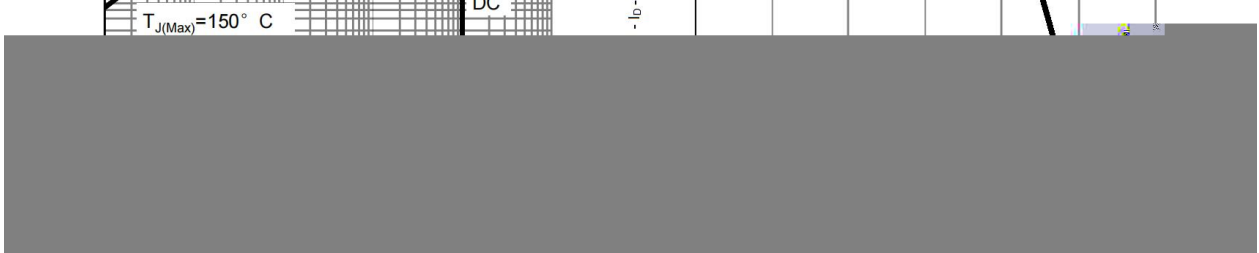
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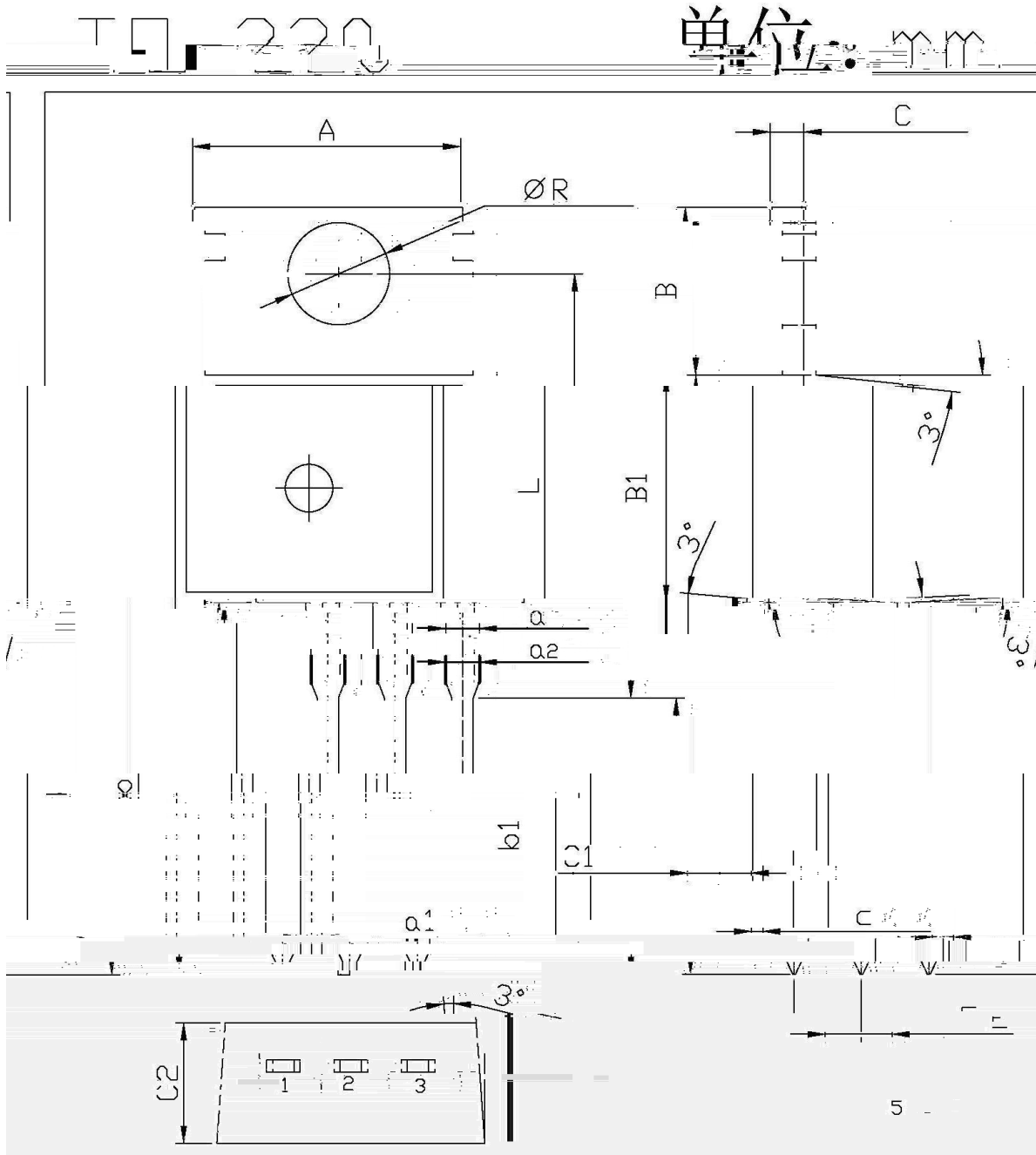
DATA SHEET

Electrical Characteristic Curve



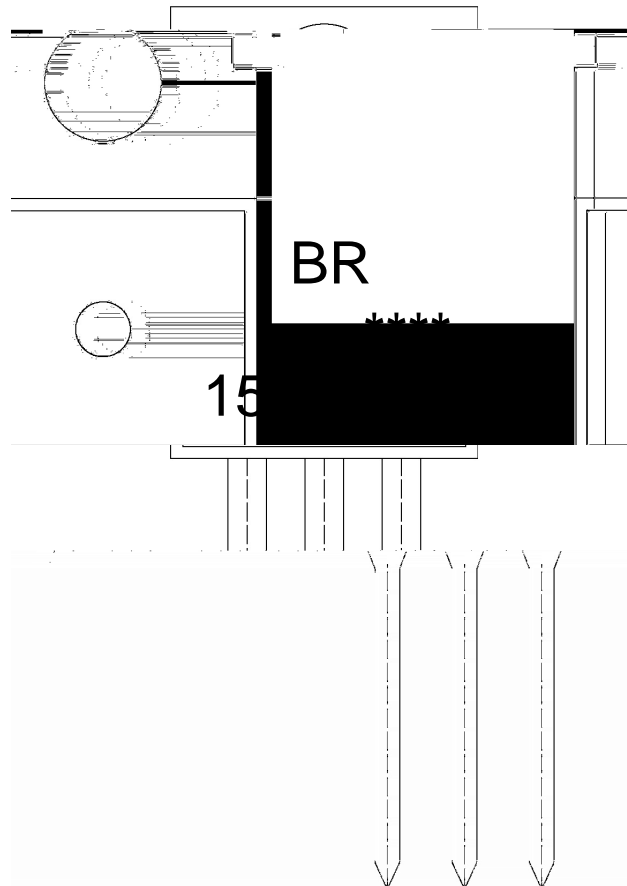


/ Package Dimensions



Symbol		Dimensions In Millimeters		Symbol		Dimensions In Millimeters	
Max	Min	Max	Min	Max	Min	Max	Min
1.4		A	9.8	10.2	\varnothing	12	
6.7		R	3.56	3.64	B	6.3	
	15.7	16.1	B1	9.0	9.4		
	12.6	13.6	C1	2.2	2.6		
	9.6	10.6	b1	0.7	0.9		
	2.34	2.74	a1	1.32	1.4		
	1.45	1.52	a2	0.4	0.5		
	0.2	0.2	C2	0.2	0.2		

/ Marking Instructions



说明：

BR： 为公司代码

150N10S： 为型号代码

****： 为生产批号代码，随生产批号变化

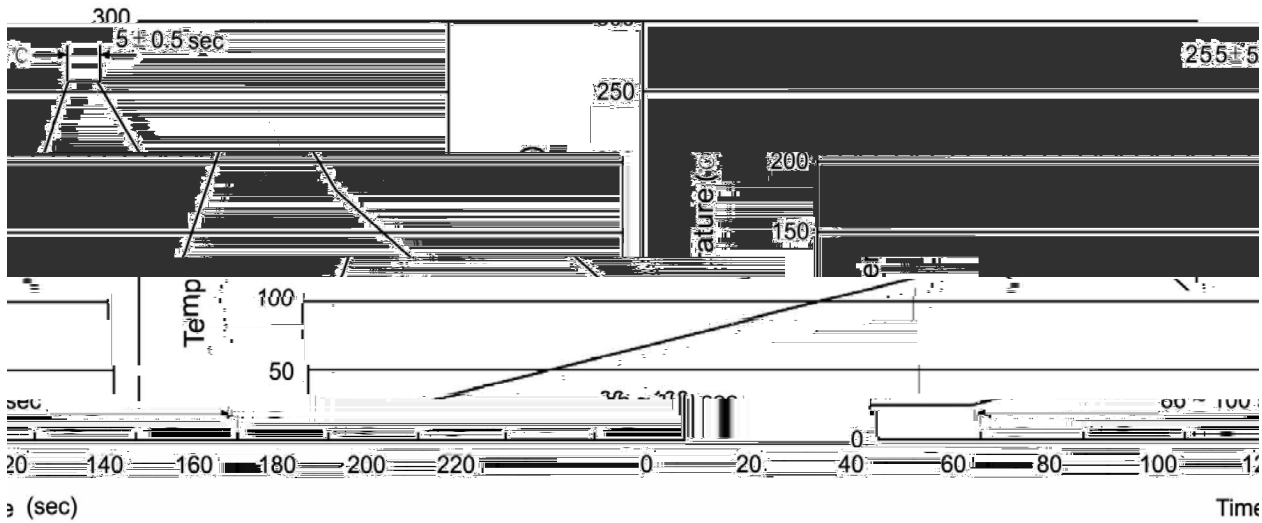
Note:

BR: Company Code

150N10S: Product Type

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-------|-----------|--|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150°C, Time:60~90sec. |
| 2 | 255±5 | | 5±0.5 | sec; | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 | | | 2 | 10°C/sec. | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

270±5°C 10±1 sec. Temp.:270±5°C Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units/Bag 只/	Units 包装数量	Dimension 包装尺寸 (unit: mm ³)
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