

/ Revised record

A	2022.07.28	ALL	AOS-AOD4286		

/ Descriptions

TO-252 N MOS

N-CHANNEL MOSFET in a TO-252 Plastic Package.

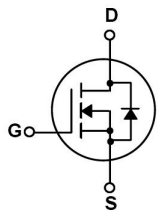
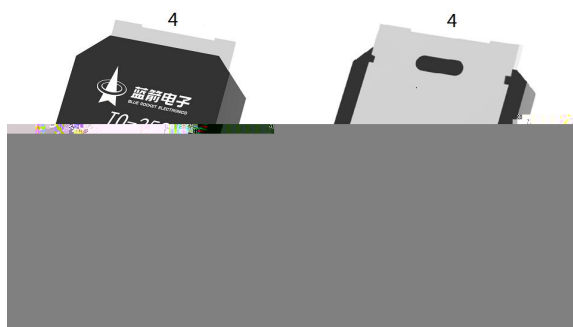
/ Features

Low On-Resistance, fast switching, HF Product.

/ Applications

DC/DC LED DC-DC

Power Management in DC/DC Converter. For LED Backlight DC-DC Boost Converter Solution.

/ Equivalent Circuit**/ Pinning**

PIN1 G PIN 2 D PIN 3 S PIN 4 D

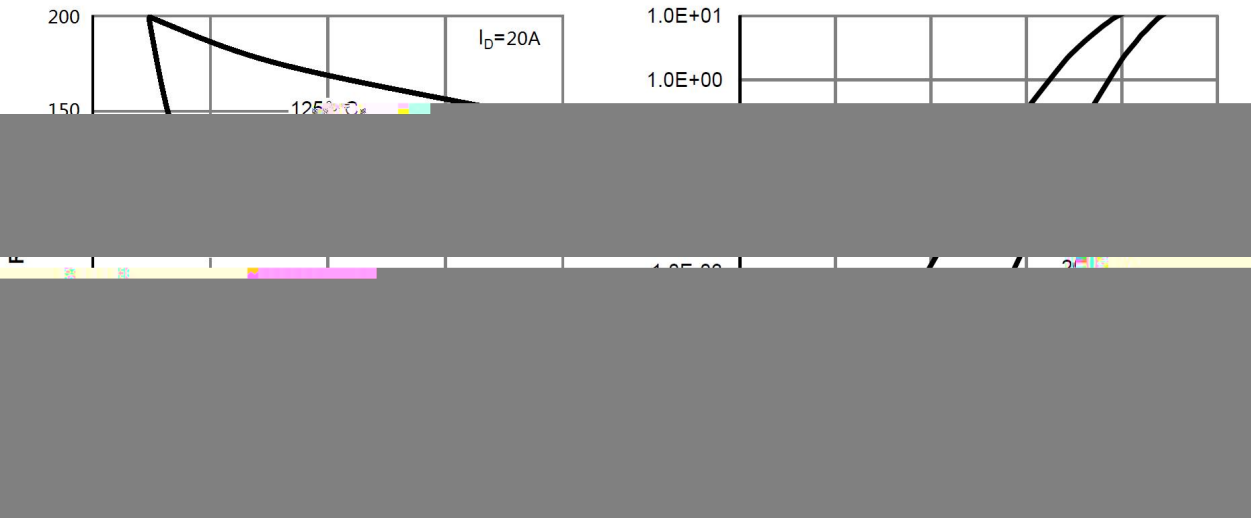
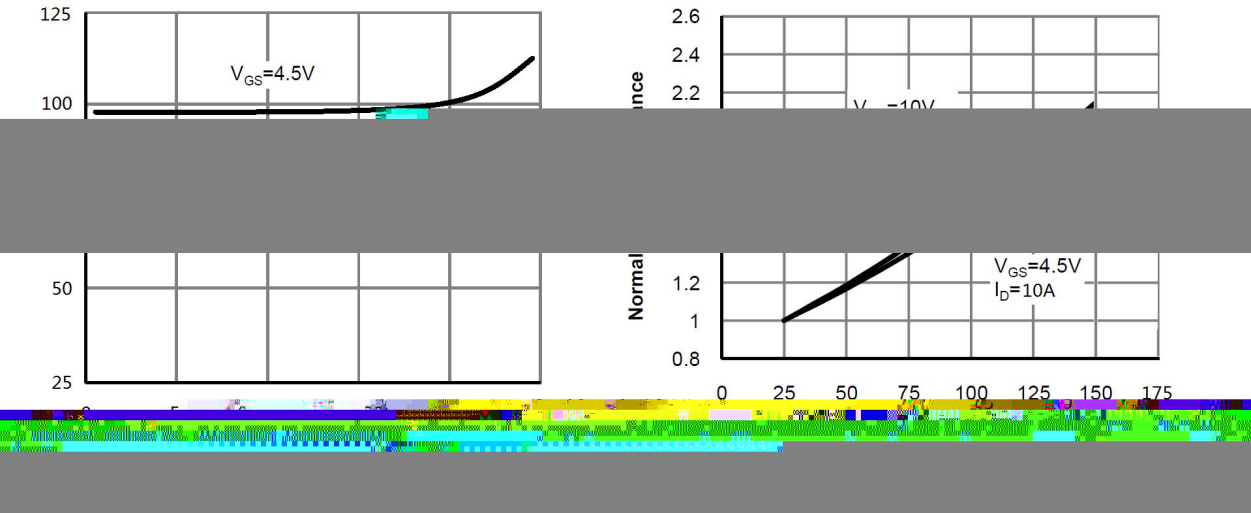
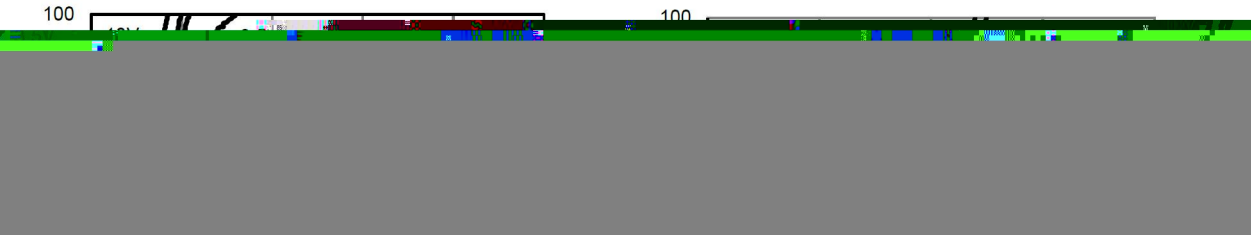
/ Marking

See Marking Instructions.

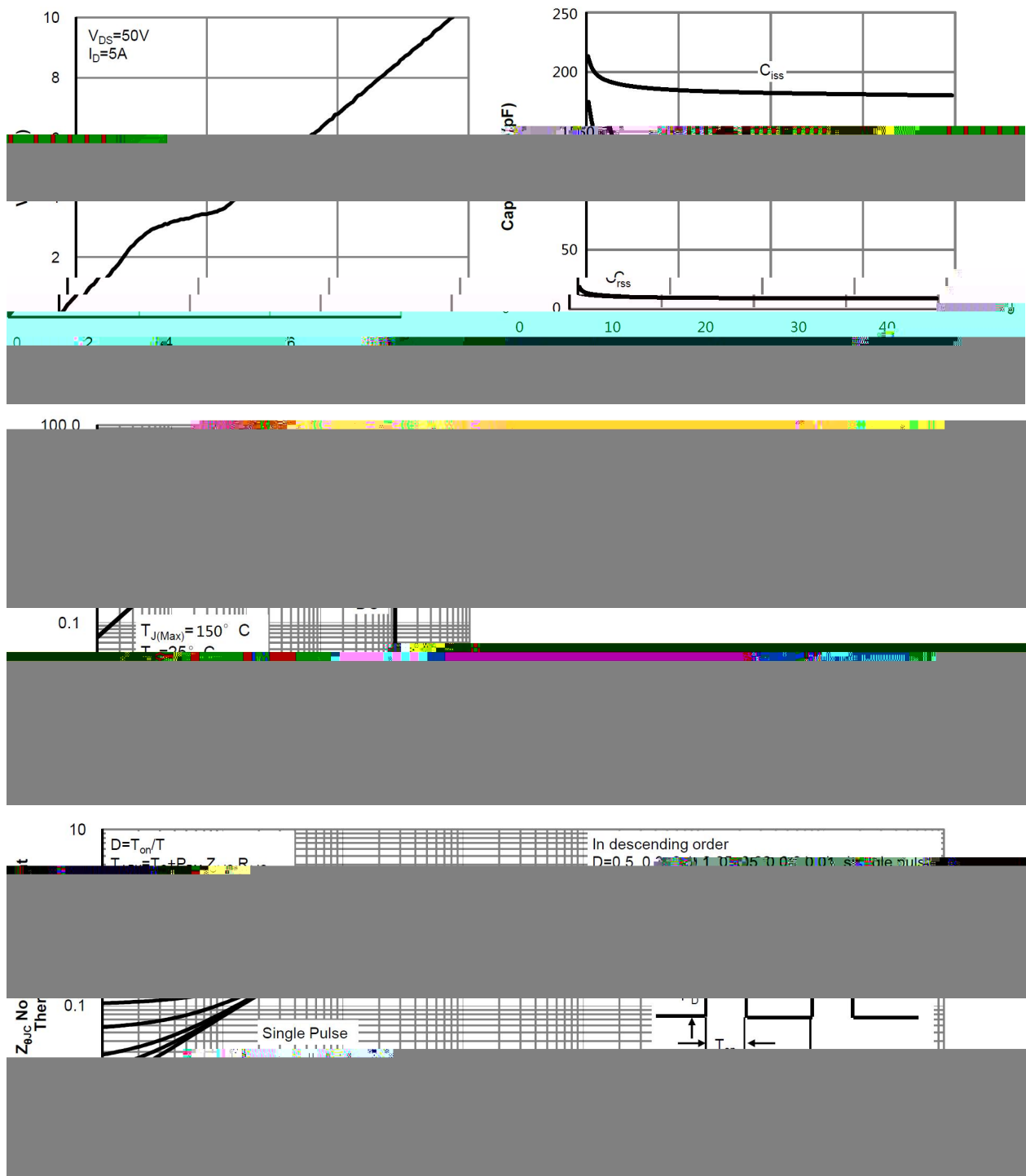
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_{g(10V)}$	$V_{GS}=10V$ $V_{DS}=50V$ $I_D=5A$		6.0		nC
Total Gate Charge	$Q_{g(4.5V)}$			2.9		
Gate Source Charge	Q_{gs}			1.0		
Gate Drain Charge	Q_{gd}			1.1		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=10\Omega$ $R_{GEN}=3\Omega$		6.2		ns
Turn-On Rise Time	t_r			2.7		
Turn-Off Delay Time	$t_{d(off)}$			18		
Turn-Off Fall Time	t_f			2.6		

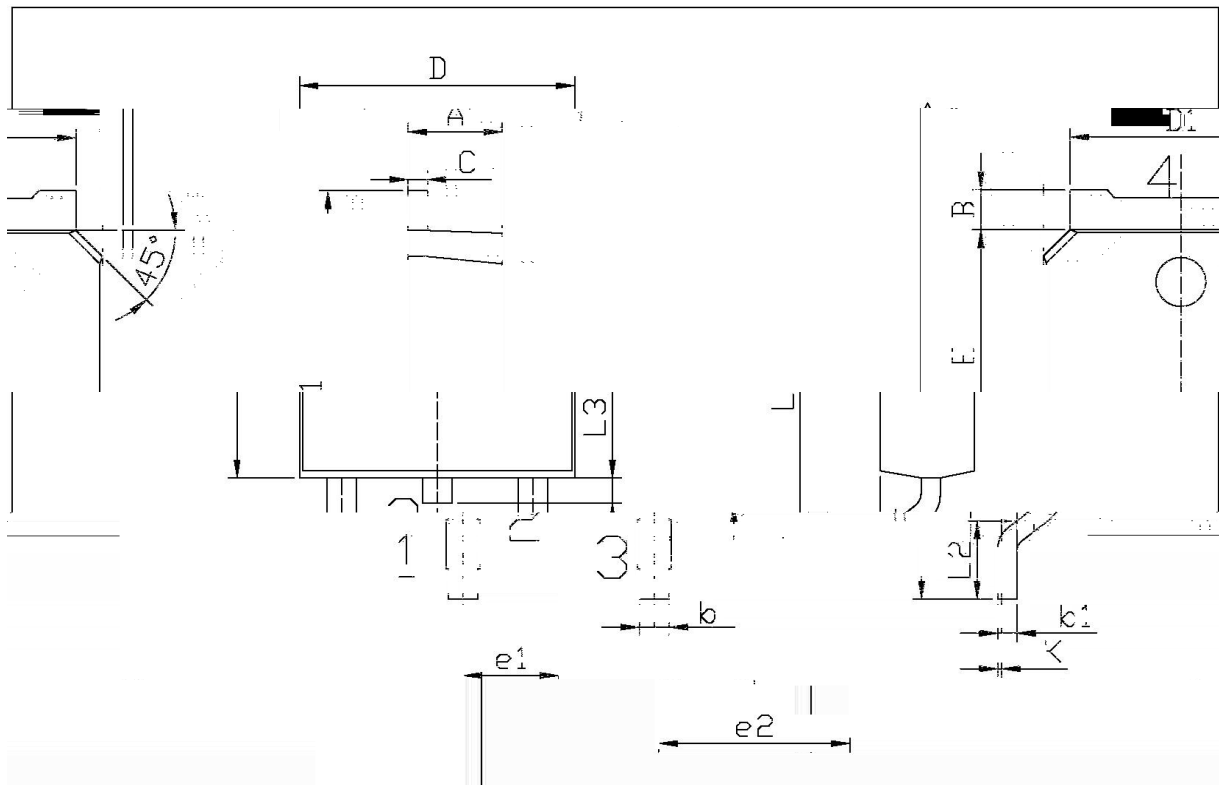
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



/ Package Dimensions

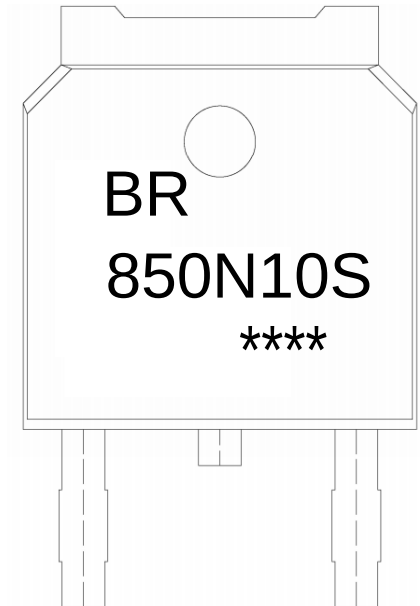


单位: mm

Symbol	Dimension	Value	Symbol	Dimension	Value
A	Pin 1 to Pin 2	2.40	A	Pin 1 to Pin 2	2.40
B	Pin 1 to Pin 3	1.25	B	Pin 1 to Pin 3	0.95
C	Pin 1 to Pin 4	0.45	C	Pin 1 to Pin 4	0.55
D	Pin 1 to Pin 5	1.70	D	Pin 1 to Pin 5	0.45
E	Pin 1 to Pin 6	2.00	E	Pin 1 to Pin 6	0.55
L1	Pin 1 to Pin 7	6.45	L1	Pin 1 to Pin 7	6.75
L2	Pin 1 to Pin 8	0.60	L2	Pin 1 to Pin 8	0.90
L3	Pin 1 to Pin 9	0.60	L3	Pin 1 to Pin 9	0.90
L4	Pin 1 to Pin 10	0.60	L4	Pin 1 to Pin 10	0.90
L5	Pin 1 to Pin 11	0.60	L5	Pin 1 to Pin 11	0.90
L6	Pin 1 to Pin 12	0.60	L6	Pin 1 to Pin 12	0.90
L7	Pin 1 to Pin 13	0.60	L7	Pin 1 to Pin 13	0.90
L8	Pin 1 to Pin 14	0.60	L8	Pin 1 to Pin 14	0.90
L9	Pin 1 to Pin 15	0.60	L9	Pin 1 to Pin 15	0.90
L10	Pin 1 to Pin 16	0.60	L10	Pin 1 to Pin 16	0.90
L11	Pin 1 to Pin 17	0.60	L11	Pin 1 to Pin 17	0.90
L12	Pin 1 to Pin 18	0.60	L12	Pin 1 to Pin 18	0.90
L13	Pin 1 to Pin 19	0.60	L13	Pin 1 to Pin 19	0.90
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L92	Pin 1 to Pin 98	0.60	L92	Pin 1 to Pin 98	0.90
L93	Pin 1 to Pin 99	0.60	L93	Pin 1 to Pin 99	0.90
L94	Pin 1 to Pin 100	0.60	L94	Pin 1 to Pin 100	0.90

T0-252

/ Marking Instructions



BR

850N10S

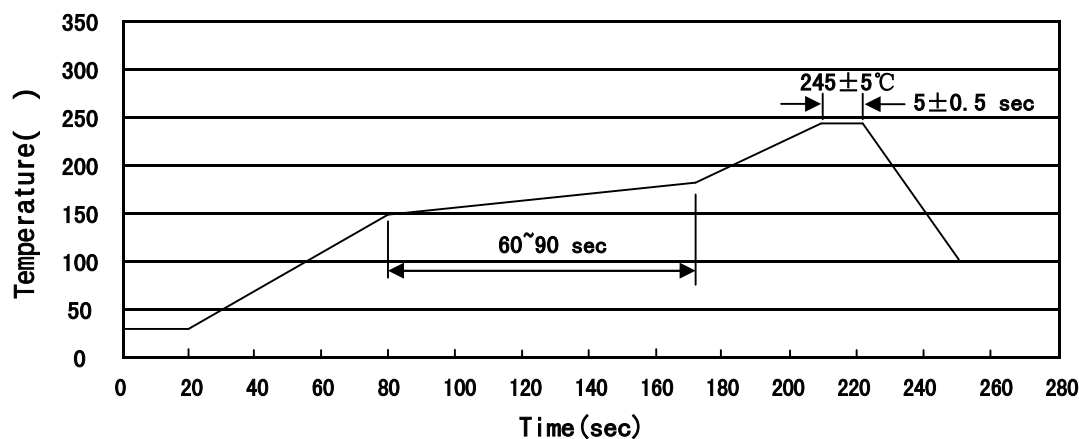
Note:

BR: Company Code

850N10S: 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 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
TO-252	2,500	2	5,000	6	30,000	13" ×16	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 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices