

/ Descriptions

TO-251 N MOS N-CHANNEL MOSFET in a TO-251 Plastic Package.

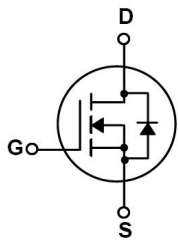
/ Features

Low gate charge, low crss, fast switching.

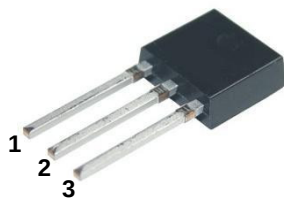
/ Applications

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S

/ h_{FE} Classifications & Marking

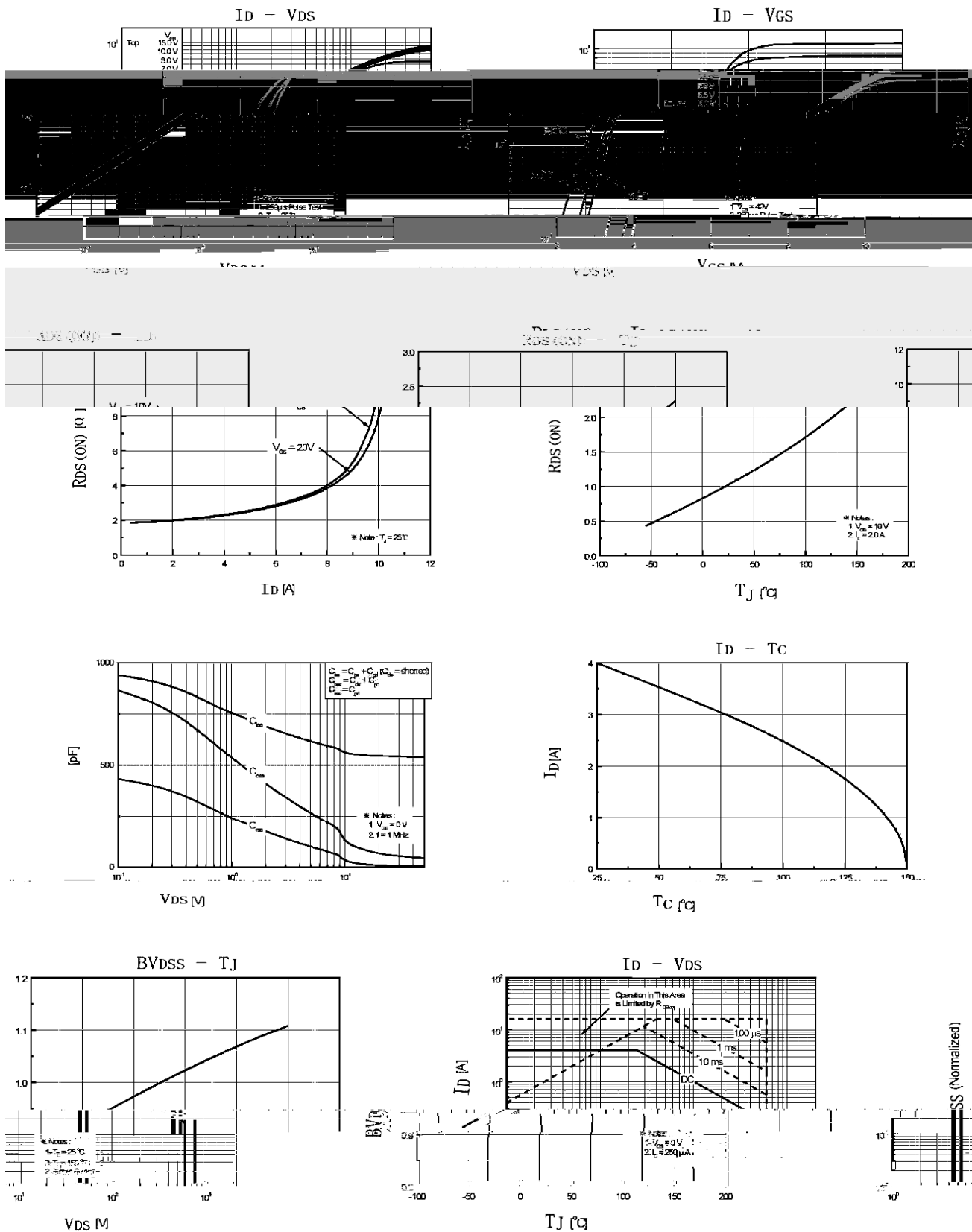
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	650	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	4.0	A
Drain Current	$I_D(T_c=100^\circ\text{C})$	2.5	A
Drain Current - Pulsed	I_{DM}	16	A
Gate-Source Voltage	V_{GS}	± 20	V
Single Pulsed Avalanche Energy	E_{AS}	240	mJ
Repetitive Avalanche Energy	E_{AR}	10	mJ
Avalanche Current	I_{AR}	4.0	A
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	33	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

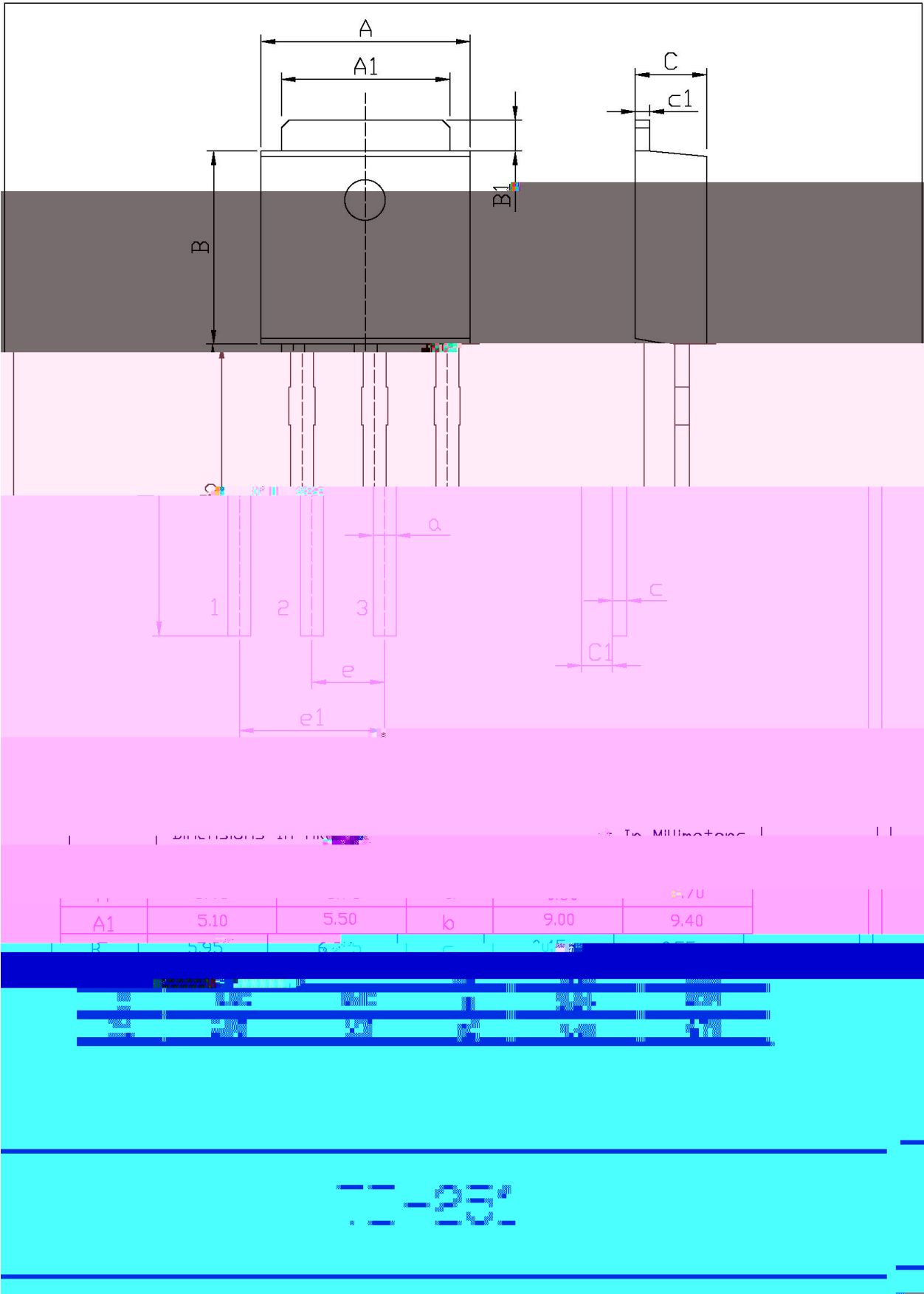
P

S

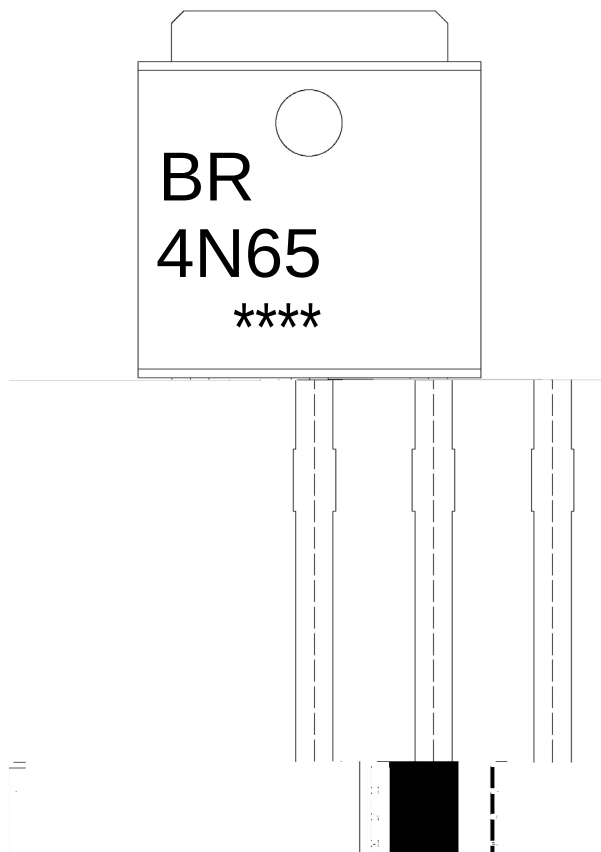
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

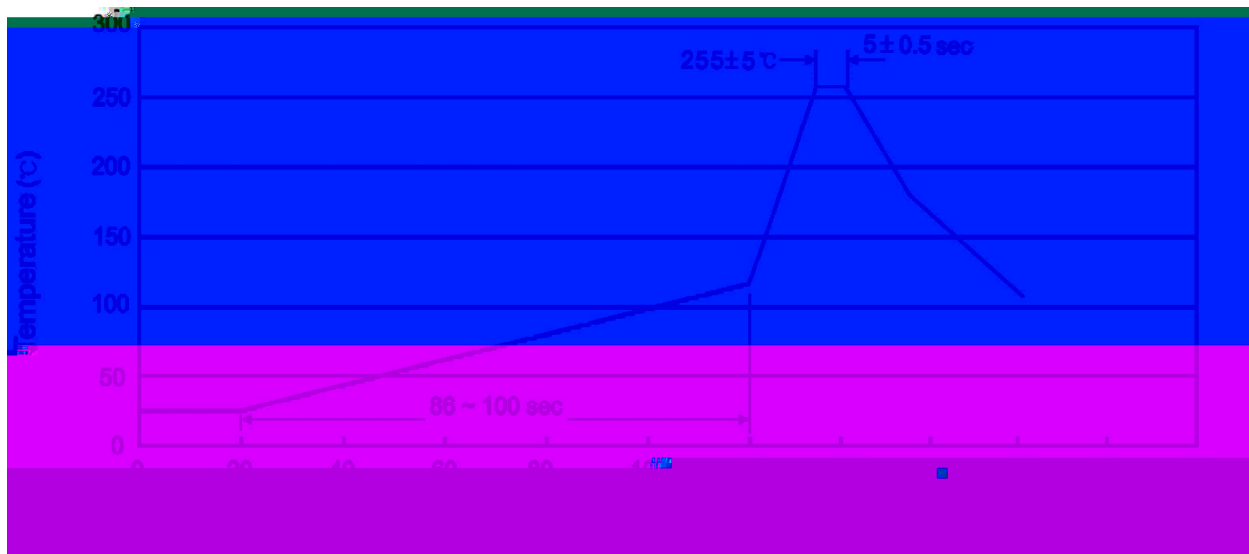
Note:

BR: Company Code

4N65: 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 | 0.5sec; | 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 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-251	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

/ 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