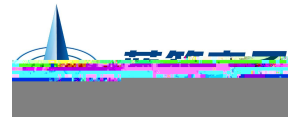


# BRF65R280C

Rev.B May.-2022



DATA SHEET

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

A

2022.4.28

ALL

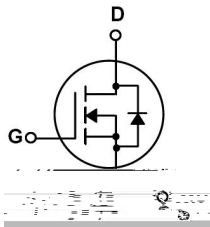
**/ Descriptions**

TO-220F      N      650V

N-CHANNEL 650V Super-Junction Power MOSFET in a TO-220F Plastic Package.

**/ Features** $R_{DS(on)} \times Q_g$  100%      ROHSVery low  $R_{DS(on)} \times Q_g$ , 100% avalanche tested, RoHS compliant.**/ Applications**

For switch mode power supply, uninterruptible power supply, power factor correction.

**/ Equivalent Circuit****/ Pinning**

PIN1   G

PIN 2   D

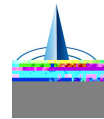
PIN 3   S

**/ Marking**

See Marking Instructions.

# BRF65R280C

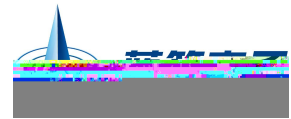
Rev.B May.-2022



| Parameter                      | Symbol                 | Rating   |    |
|--------------------------------|------------------------|----------|----|
| Drain-Source Voltage           | $V_{DSS}$              | 650      |    |
| Drain Current                  | $I_D(T_c=25^{\circ}C)$ | 14       |    |
| Drain Current - Pulsed         | $I_{DM}$               | 56       |    |
| Gate-Source Voltage            | $V_{GS}$               | $\pm 30$ |    |
| Single Pulsed Avalanche Energy | $E_{AS}$               | 433      | mJ |

# BRF65R280C

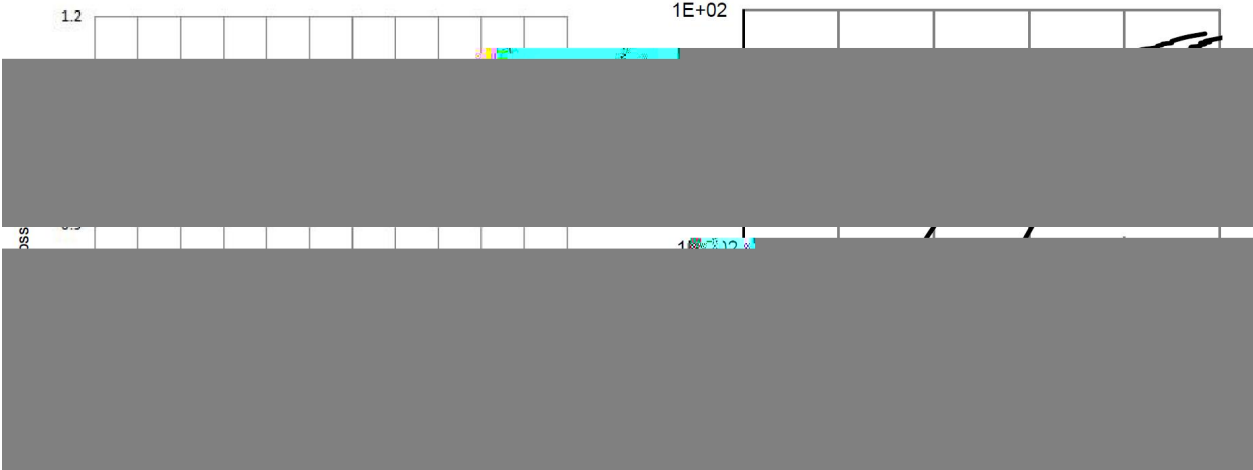
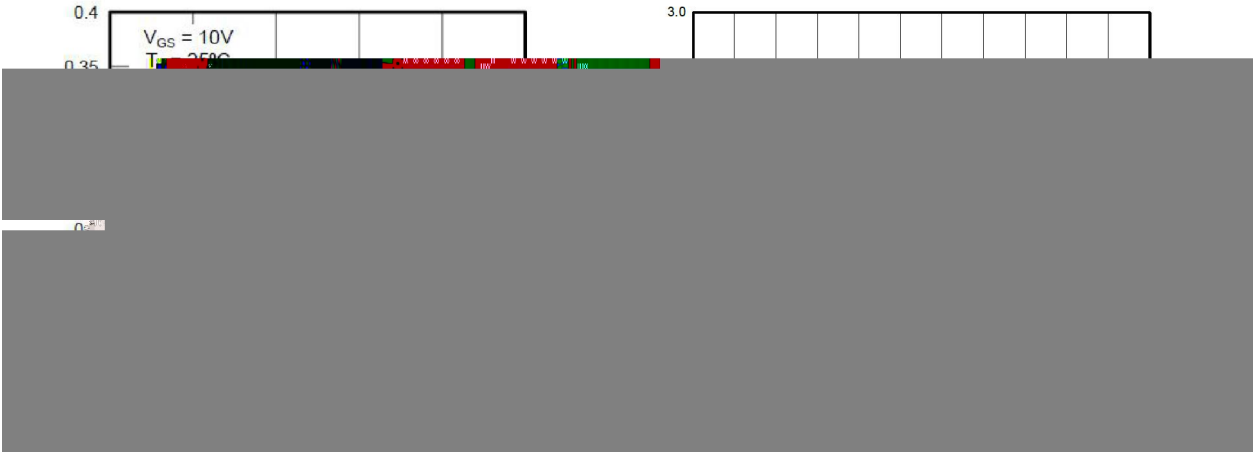
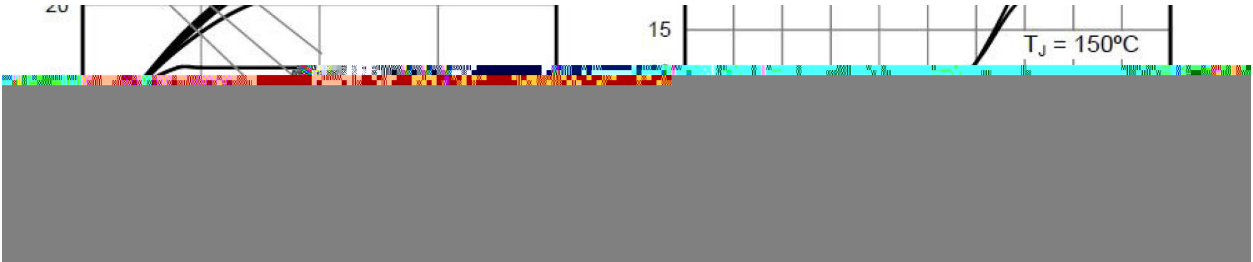
Rev.B May.-2022



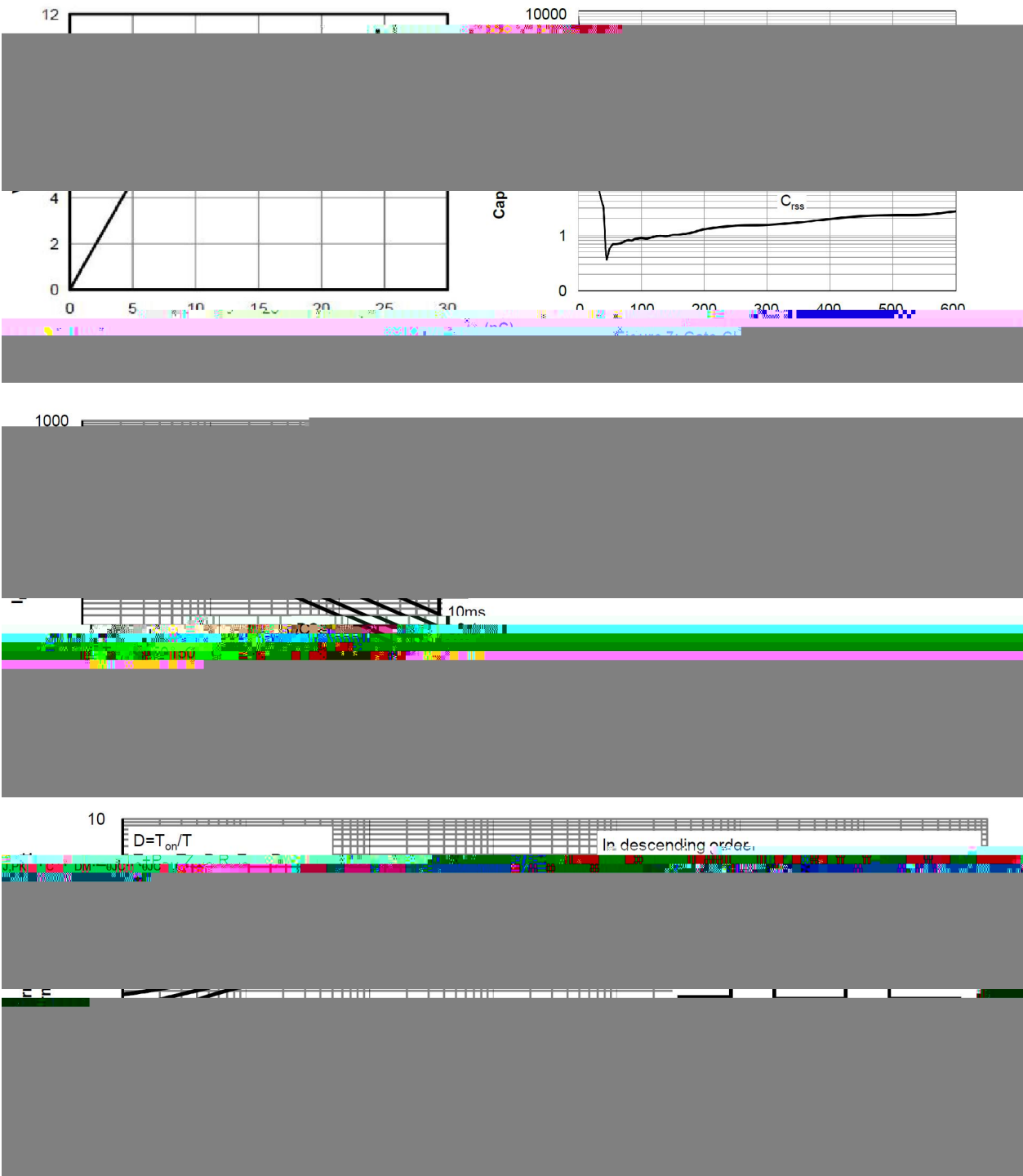
DATA SHEET

| Parameter  | Symbol | Test Conditions | Min | Typ | Max | Unit |
|------------|--------|-----------------|-----|-----|-----|------|
| Continuous |        |                 |     |     |     |      |

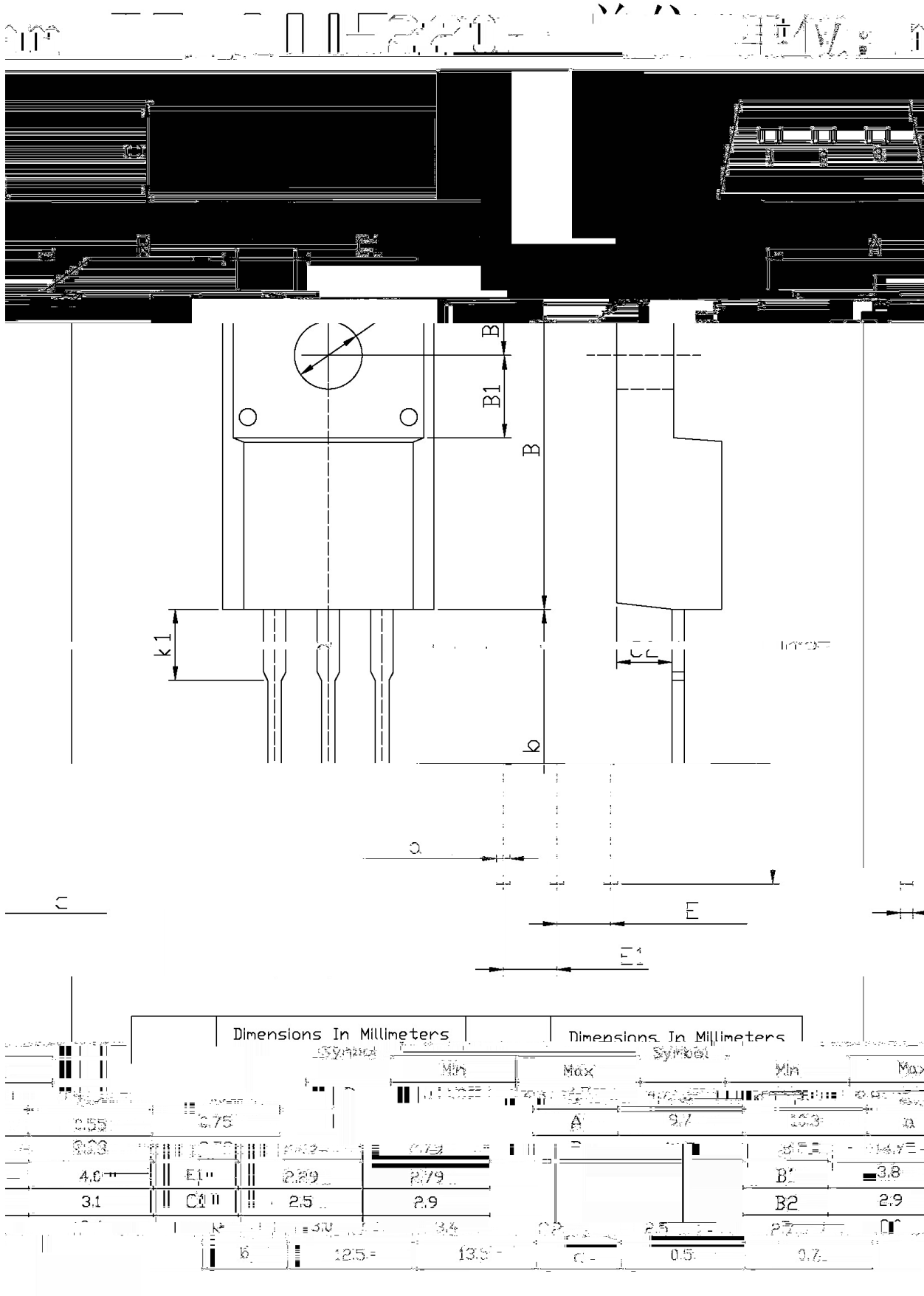
/ Electrical Characteristic Curve

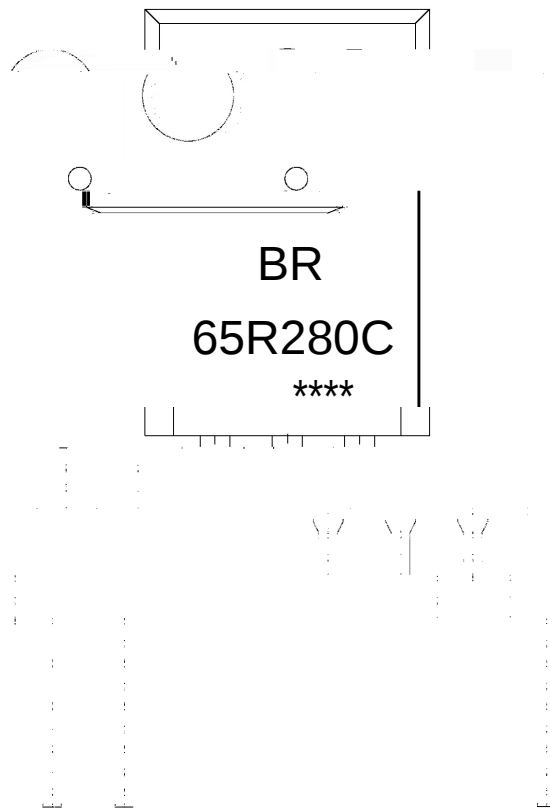


/ Electrical Characteristic Curve



## / Package Dimensions



**/ Marking Instructions**

说明：

BR： 为公司代码

65R280C： 为型号代码

\*\*\*\*： 为生产批号代码，随生产批号变化

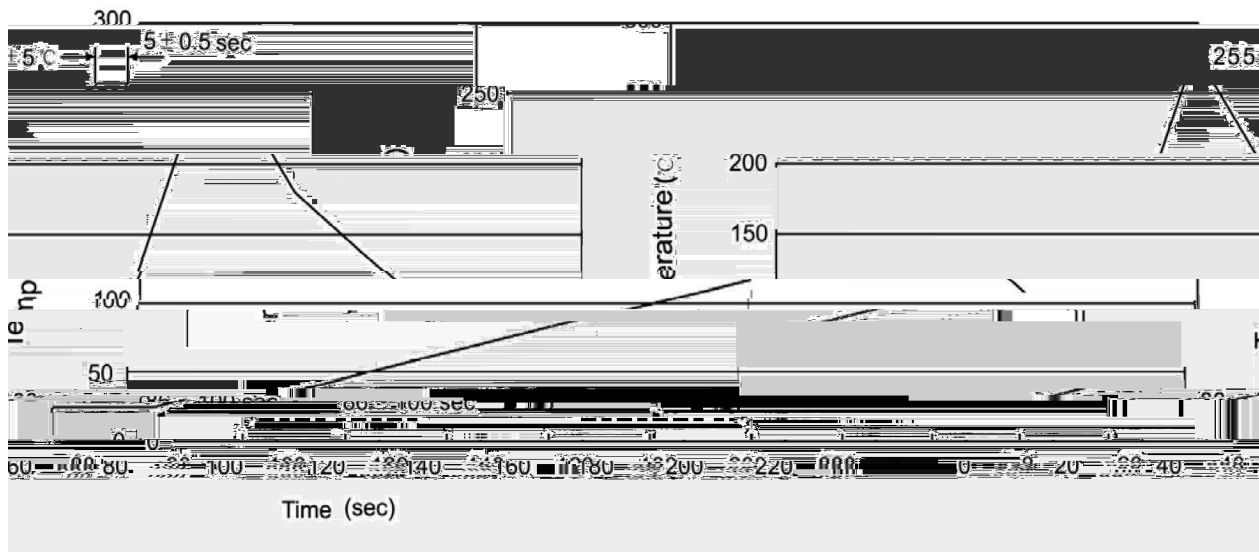
Note:

BR: Company Code

65R280C: Product Type

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

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



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

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

## / Resistance to Soldering Heat Test Conditions

温度：270±5°C

时间：10±1 sec.

Temp.:270±5°C

Time:10±1 sec

## / Packaging SPEC.

散件包装 / BULK

| Package Type<br>封装形式 | Units 包装数量     |                     |                      |                            |                      | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|----------------|---------------------|----------------------|----------------------------|----------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Bag<br>/ | Bags/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Bag 袋                                   | Inner Box 盒 | Outer Box 箱 |