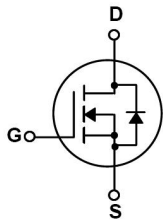


TO-220      N      MOS      N-CHANNEL MOSFET in a TO-220 Plastic Package.

Low gate charge, low crss, fast switching.

DC/DC

.Suited for low voltage applications such as automotive,DC/DC Converters,and high efficiency switching for power management in protable and battery operated products.

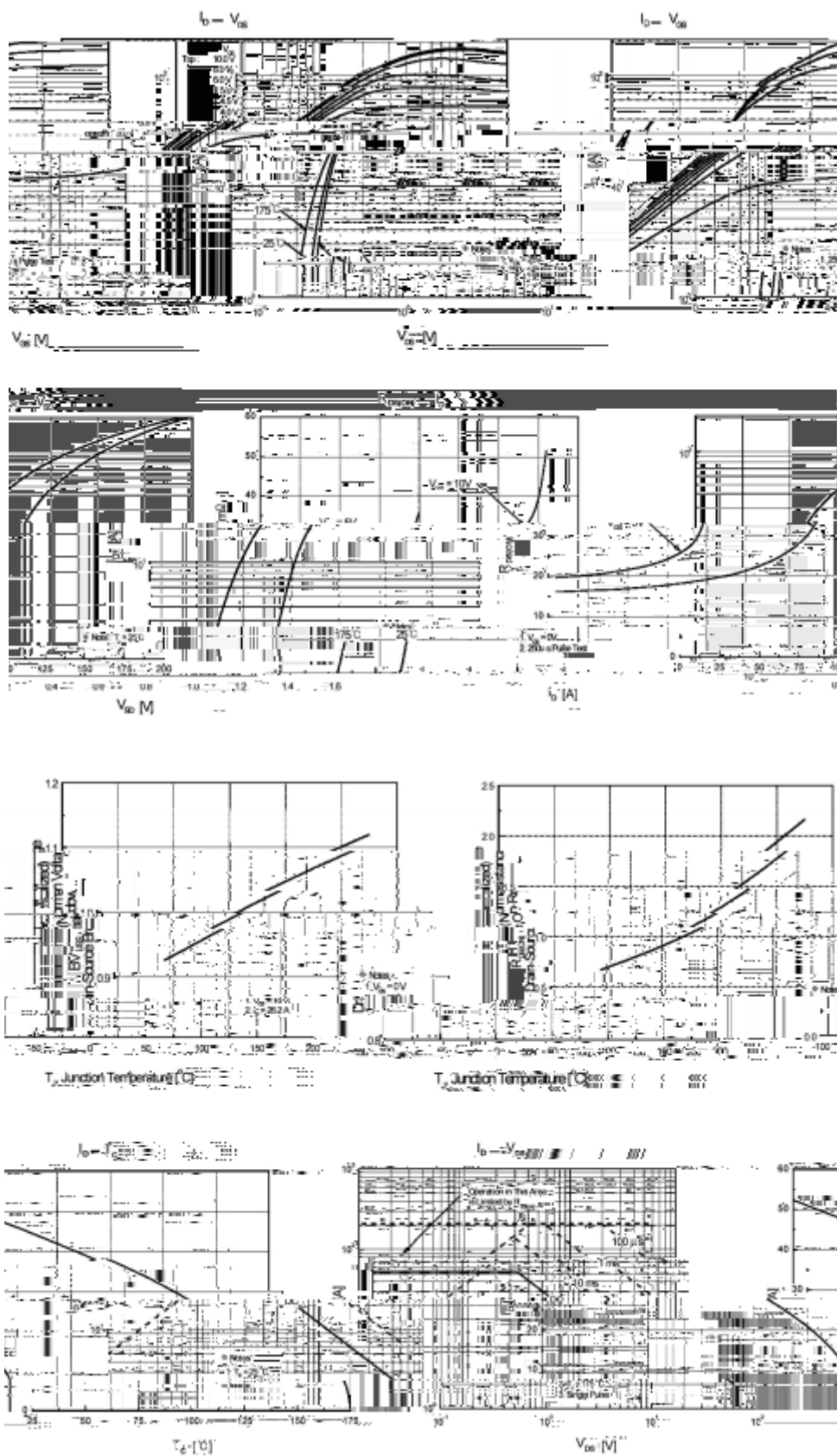


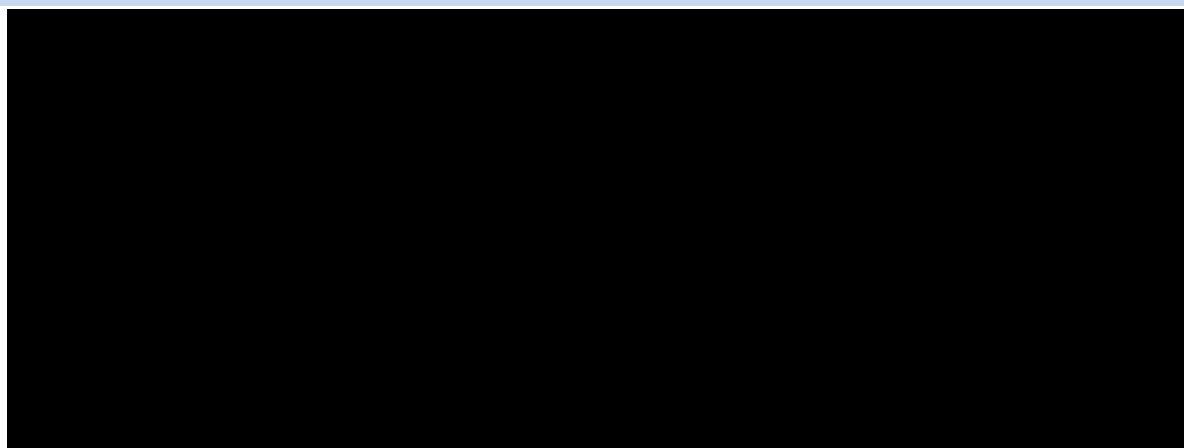
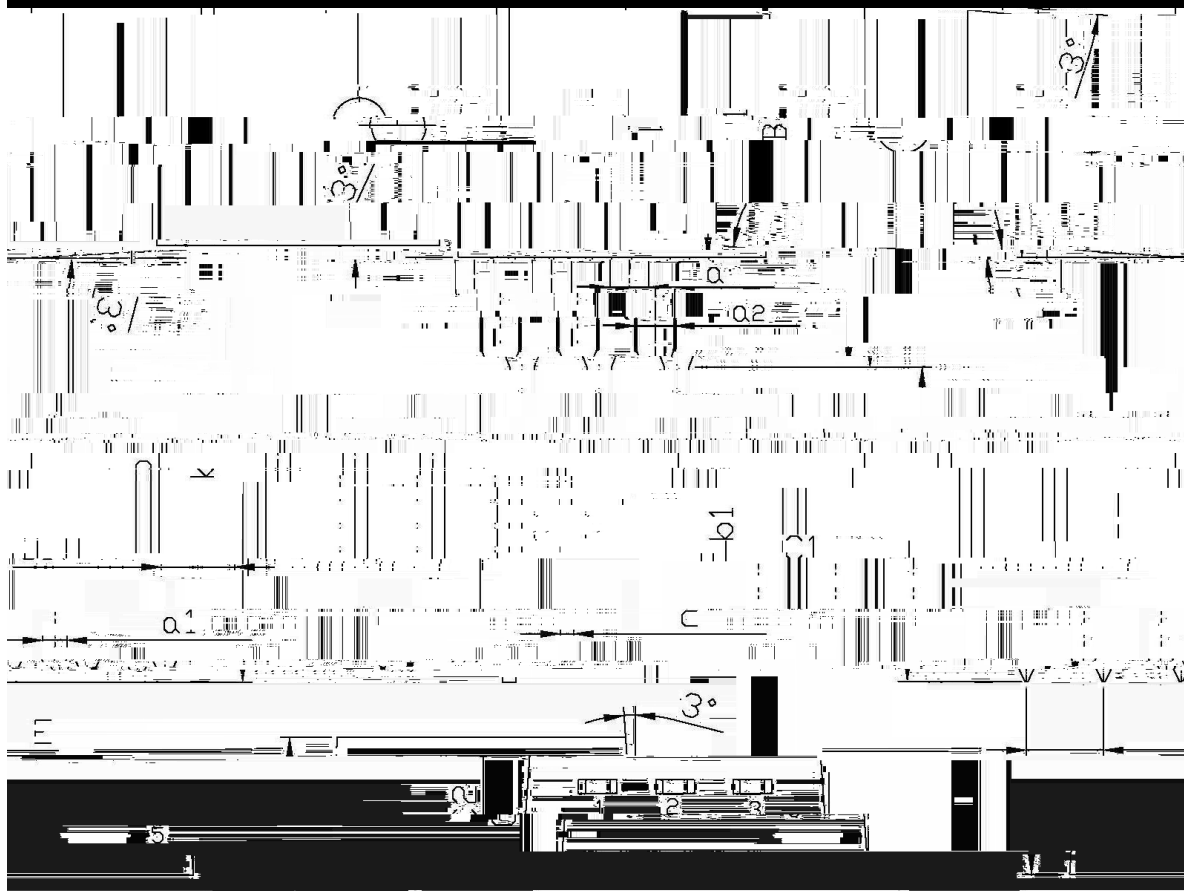
PIN1   G      PIN 2   D      PIN 3   S

See Marking Instructions.

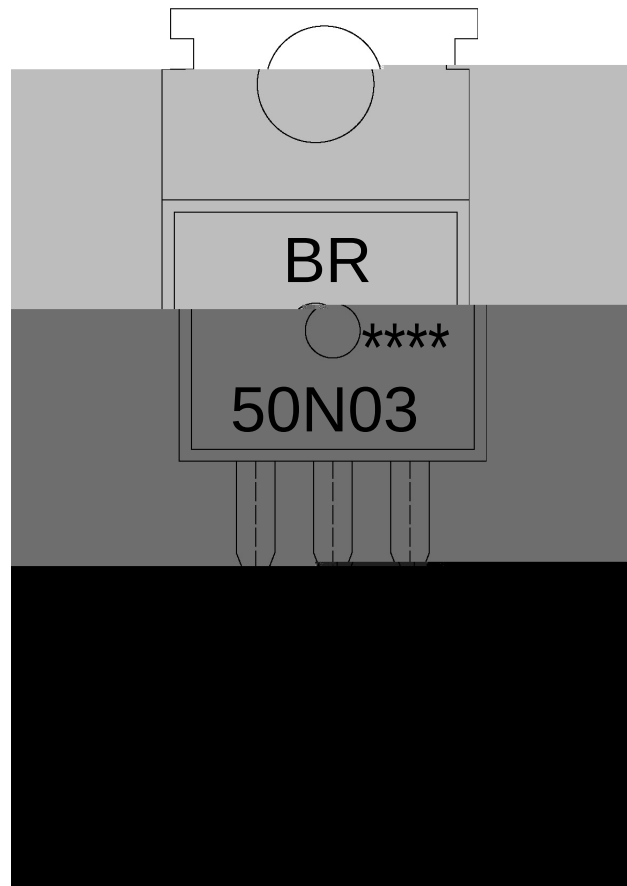
| Parameter                              | Symbol                      | Rating     | Unit |
|----------------------------------------|-----------------------------|------------|------|
| Drain-Source Voltage                   | $V_{DS}$                    | 30         | V    |
| Drain Current                          | $I_D(T_c=25^\circ\text{C})$ | 50         | A    |
| Pulsed Drain Current                   | $I_{DM}$                    | 200        | A    |
| Gate-Source Voltage                    | $V_{GS}$                    | $\pm 20$   | V    |
| Avalanche Current                      | $I_{AS}$                    | 9.9        | A    |
| Single Pulsed Avalanche Energy         | $E_{AS}$                    | 147        | mJ   |
| Total Power Dissipation                | $P_D(T_c=25^\circ\text{C})$ | 30         | W    |
| Junction and Storage Temperature Range | $T_J, T_{STG}$              | -55 to 150 |      |

| Parameter                                                | Symbol | Test Conditions | Min | Typ | Max | Unit |
|----------------------------------------------------------|--------|-----------------|-----|-----|-----|------|
| Zero Gate Vo48098 4Zero Gate 0 0 TD( )Tj2.4457 -1.3884 A |        |                 |     |     |     |      |





| Dimensions in Millimeters                                                           |      | Dimensions in Millimeters                                                             |      |
|-------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|------|
| Symbol                                                                              | Max  | Symbol                                                                                | Max  |
|  | 14.7 |    | 10.2 |
|  | 9.8  |  | 12.7 |
|  | 2.56 |  | 16.3 |
|  | 15.7 |    | 9.0  |
|  | 16.1 |  | 9.4  |
|  | 8.6  |    | 12.7 |
|  | 16.1 |  | 19.0 |
|  | 14.7 |    | 12.7 |
|  | 1.45 |  | 0.2  |



BR

50N03

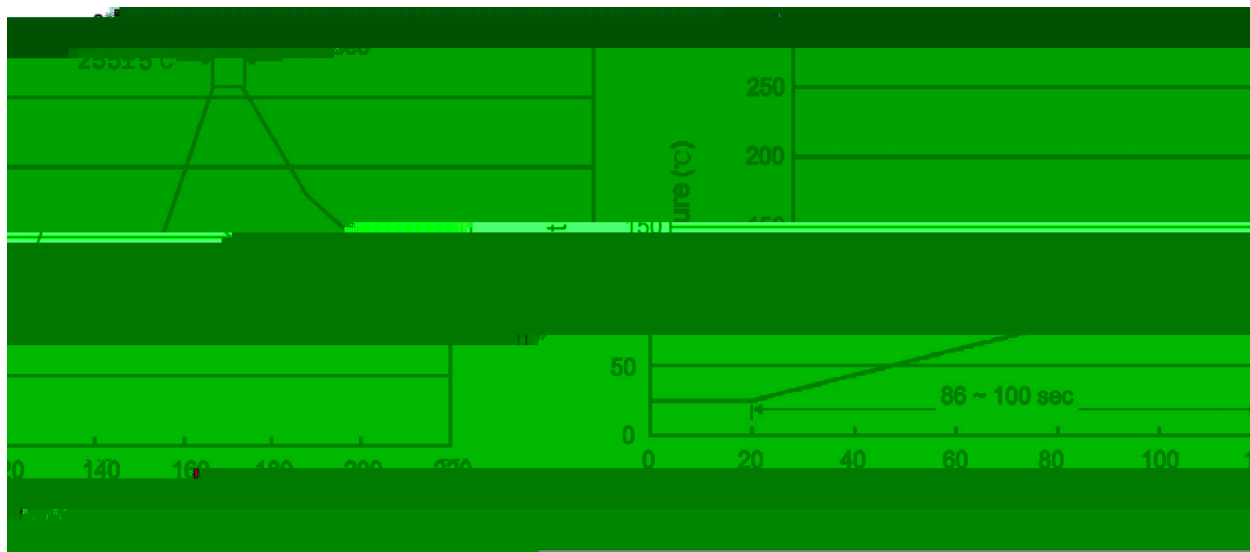
\*\*\*\*

Note:

BR: Company Code

50N03: Product Type.

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



Note:

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

|       |           |             |               |
|-------|-----------|-------------|---------------|
| 270±5 | 10±1 sec. | Temp.:270±5 | Time:10±1 sec |
|-------|-----------|-------------|---------------|

/ 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>只/袋 | Bags/Inner Box<br>袋/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Bag 袋                                   | Inner Box 盒 | Outer Box 箱 |
| TO-220/F             | 200              | 10                    | 2,000                  | 5                            | 10,000                 | 135×190                                 | 237×172×102 | 560×245×195 |

/ TUBE

| Package Type<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Tube<br>只/套管 | Tubes/Inner Box<br>套管/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Tube 套管                                 | Inner Box 盒 | Outer Box 箱 |
| TO-220/F             | 50                 | 20                      | 1,000                  | 5                            | 5,000                  | 532×31.4×5.5                            | 555×164×50  | 575×290×180 |