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TO-252 N 650V

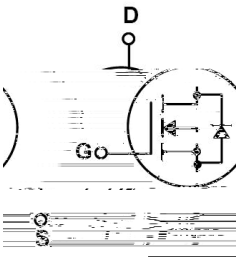
N-CHANNEL 650V Super-Junction Power MOSFET in a TO-252 Plastic Package.

$R_{DS(on)}$ $C_{rss}$

Low $R_{DS(on)}$,low gate charge, low $C_{rss}$, fast switching, HF Product.

DC/DC

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






PIN1 G PIN 2 D PIN 3 S PIN 4 D

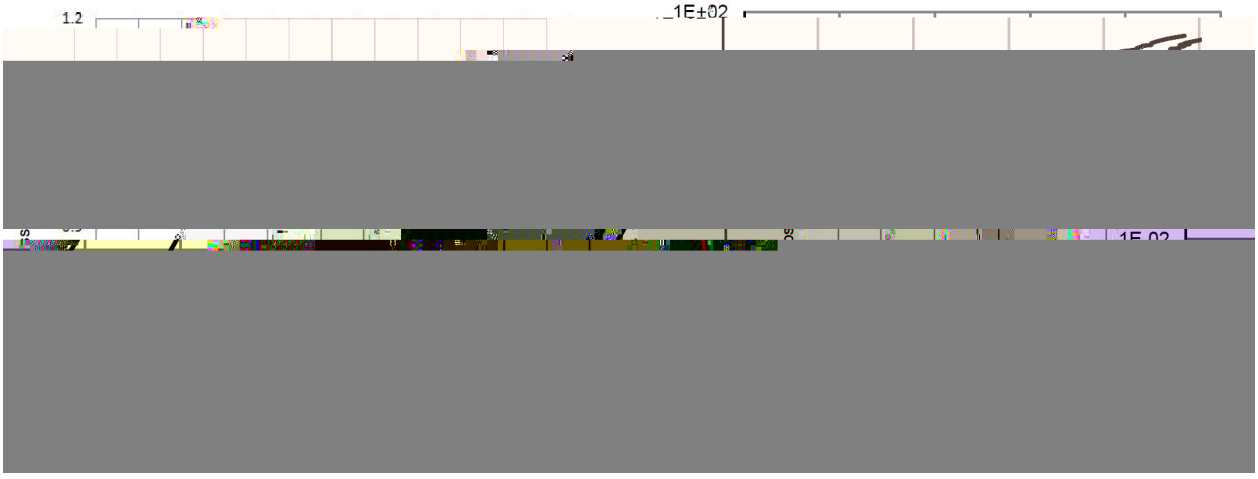
See Marking Instructions.

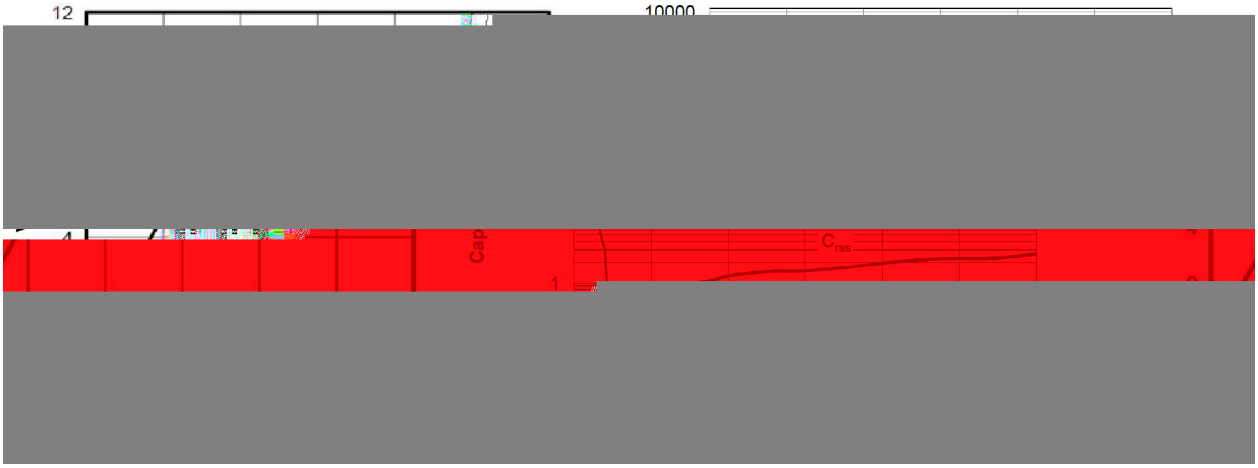
| 参数<br>Parameter | 符号<br>Symbol | 数值<br>Rating | 单位<br>Unit |
|---|---|---|---|
| Drain- | $V_{DS}$ | 650 | V |

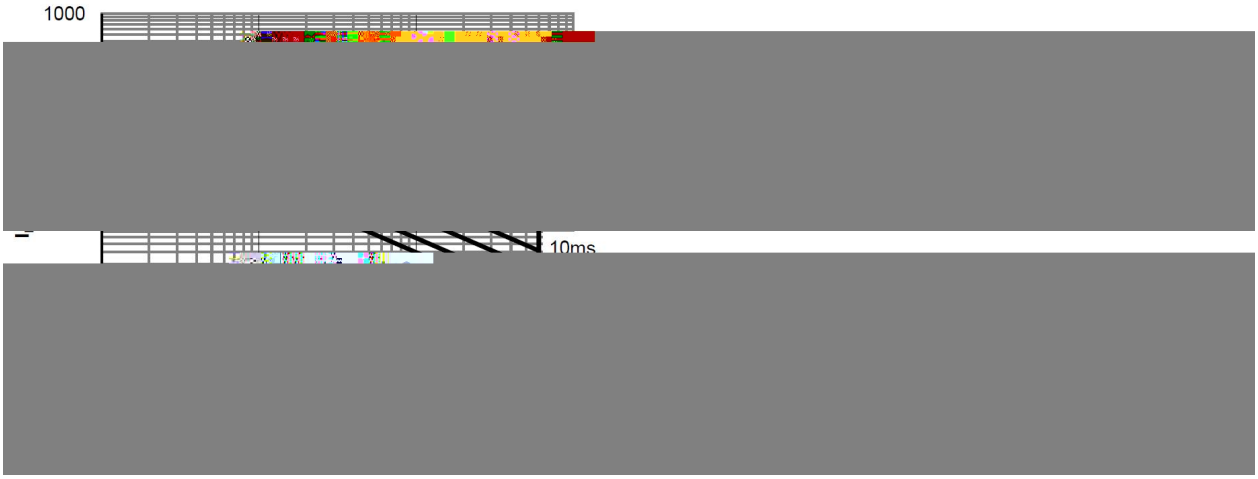
| 参数<br>Parameter | 符号<br>Symbol | 测试条件<br>Test Conditions | 最小值<br>Min | 典型值<br>Typ | 最大值<br>Max | 单位<br>Unit |
|---|---|---|---|---|---|---|
| Continuous Diode Forward Current | $I_S$ | | | | 14 | A |
| Total Gate Charge | $Q_g$ | $V_{DS}$=520V $I_D$=7.5A<br>$V_{GS}$=10V | | 26 | | nC |
| Gate-Source Charge | $Q_{gs}$ | | | 3.6 | | nC |
| Gate-Drain Charge | $Q_{gd}$ | | | 10.5 | | nC |
| Reverse recovery time | $t_{rr}$ | $V_R$ | | | | |

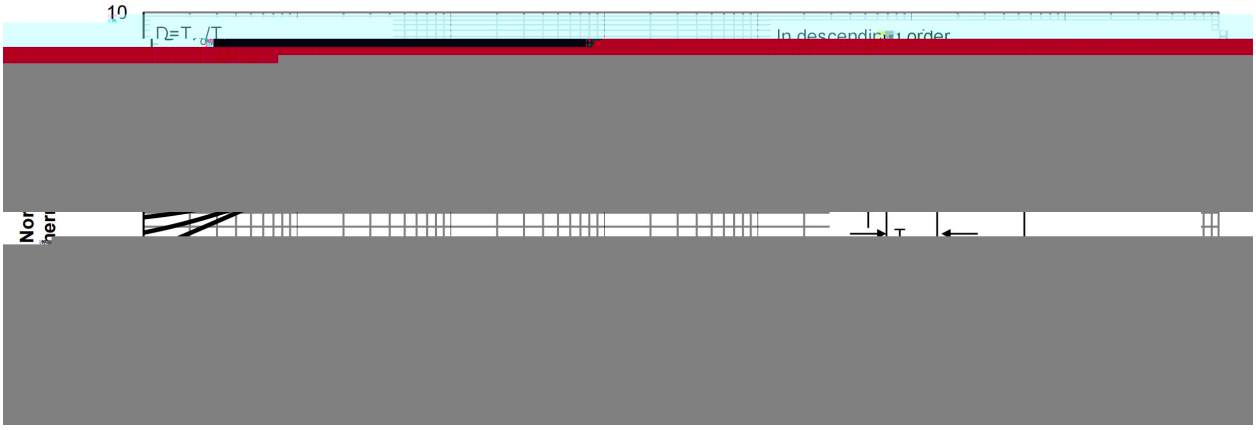


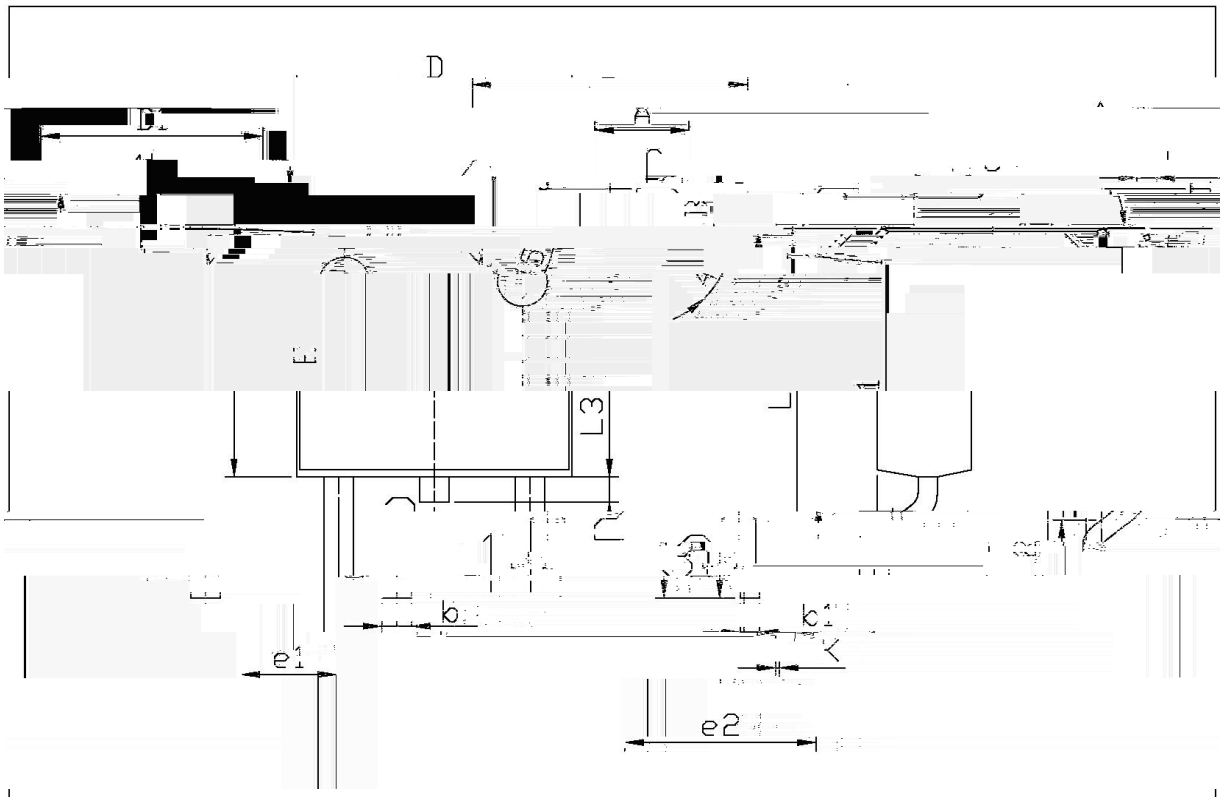


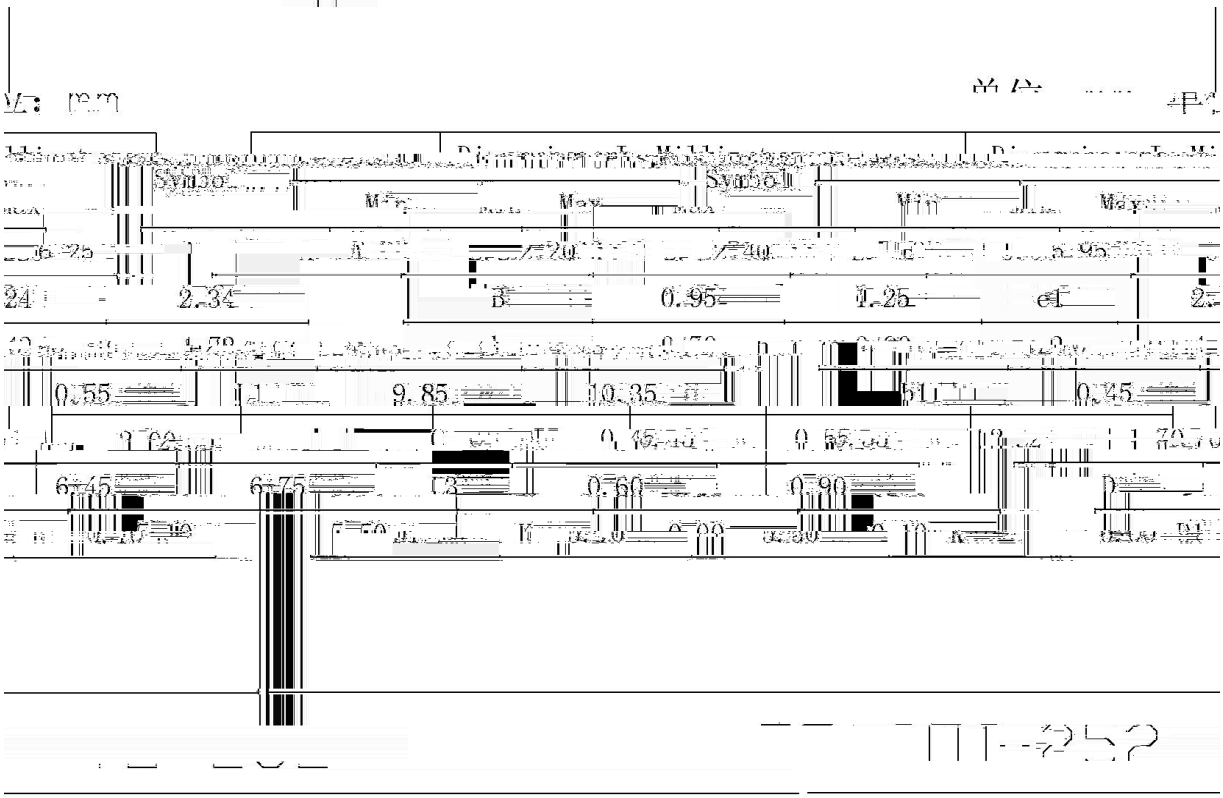


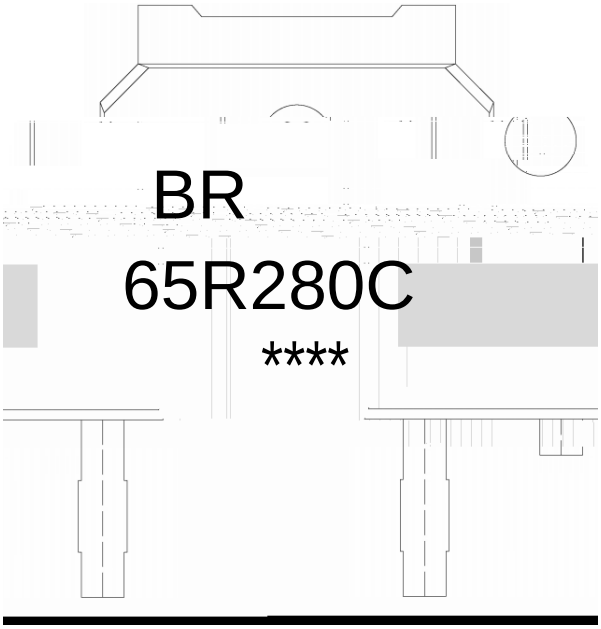

12
10000
Cap
$C_{rss}$
1


1000
10ms


10
In descending order
T


D
L3
b
b1
e1
e2


Symbol
Min
Max
2.34
0.95
1.25
0.55
9.85
10.35
0.45
6.45
6.75
0.60
0.90




BR

Note:

| | |
|---|---|
| BR: | Company Code |
| 65R280C: | Product Type Code |
| ****: | Lot No. Code, code change with Lot No |

## Temperature Profile for IR Reflow Soldering(Pb-Free)

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| | | | | Note: |
| 1 | 150 | 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5 10±1 sec. Temp.:260±5℃ Time:10±1 sec

/ 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 | |