TO-3P

Schottky Barrier Diode in a TO-3P Plastic Package.

Low forward voltage drop, low power losses, High efficiency operation.

OR-ing DC-DC

For use in high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

## / Absolute Maximum Ratings(Ta=25 )

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RM}$<br>$V_{RWM}$<br>$V_{DC}$ | 200 | V |
| RMS Reverse Voltage | $V_{RMS}$ | 140 | V |
| Average forward current | $I_{F(AV)}$ | 2 15 | A |
| Non-Repetitive Peak Forward Surge Current | $I_{FSM}$ | 200 | A |
| Thermal Resistance Junction to Ambient case | $R_{\theta Jc}$ | 1.4 | /W |
| Operating and Storage Temperature Range | $T_j$ $T_{stg}$ | -40 +150 | |

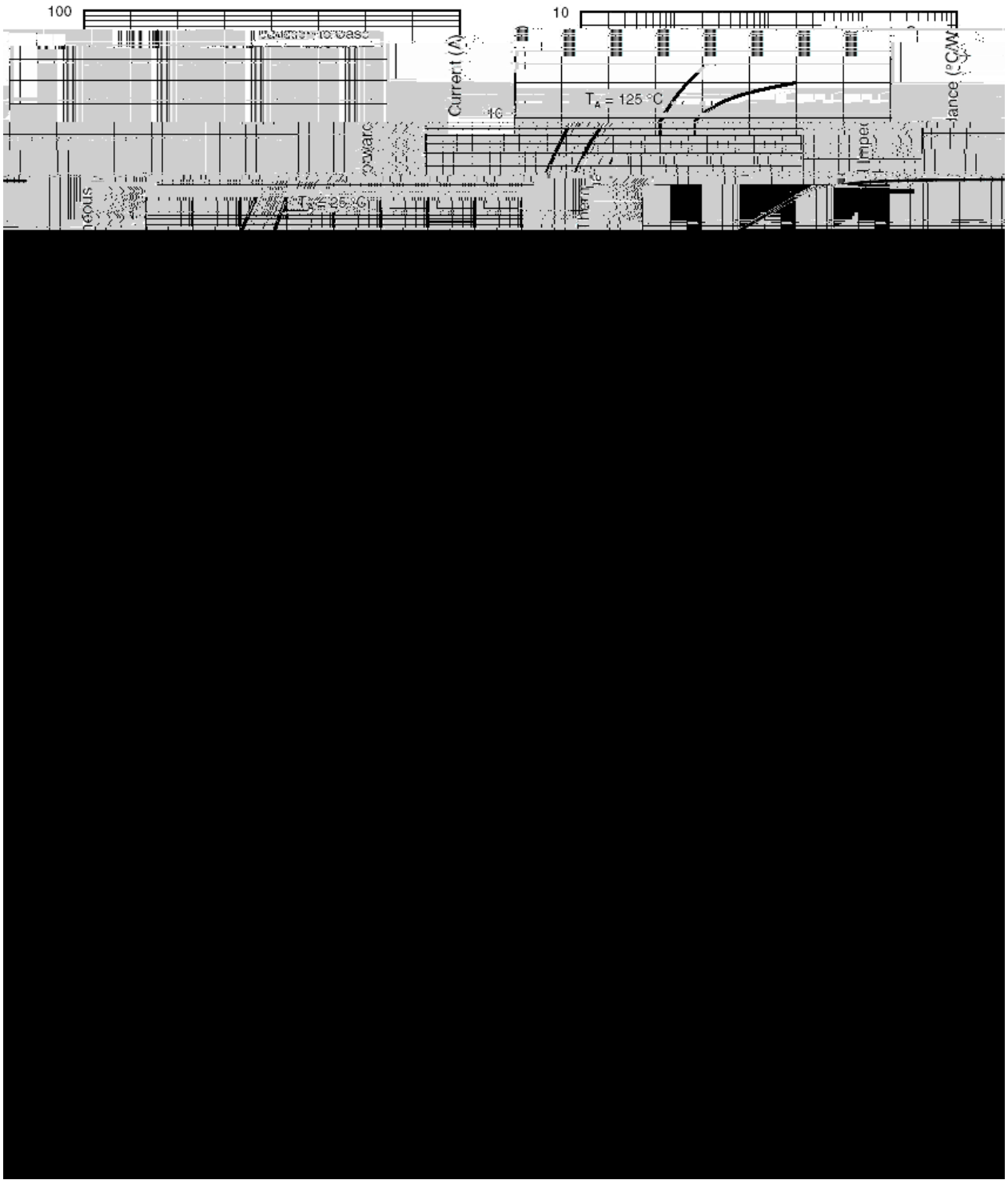
## / Electrical Characteristics(Ta=25 )

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse Breakdown Voltage | $V_{BR}$ | $I_R$=1mA(Ta=25 ) | 200 | | | V |
| Forward Voltage | $V_F$ | $I_F$ =5A(Ta=25 ) | | 0.73 | 0.85 | V |
| | | $I_F$ =10A(Ta=25 ) | | 0.80 | 0.95 | V |
| | | $I_F$ =15A(Ta=25 ) | | 0.92 | 1.15 | V |
| | | $I_F$ =5A(Ta=125 ) | | 0.58 | | V |
| | | $I_F$ =10A(Ta=125 ) | | 0.66 | | V |
| | | $I_F$ =15A(Ta=125 ) | | 0.71 | 0.85 | V |
| Instantaneous Reverse current (Note 1) | $I_R$ Note 1 | $V_R$=200V(Ta=25 ) | | 4 | 20 | μA |
| | | $V_R$=200V(Ta=125 ) | | 5 | 10 | mA |

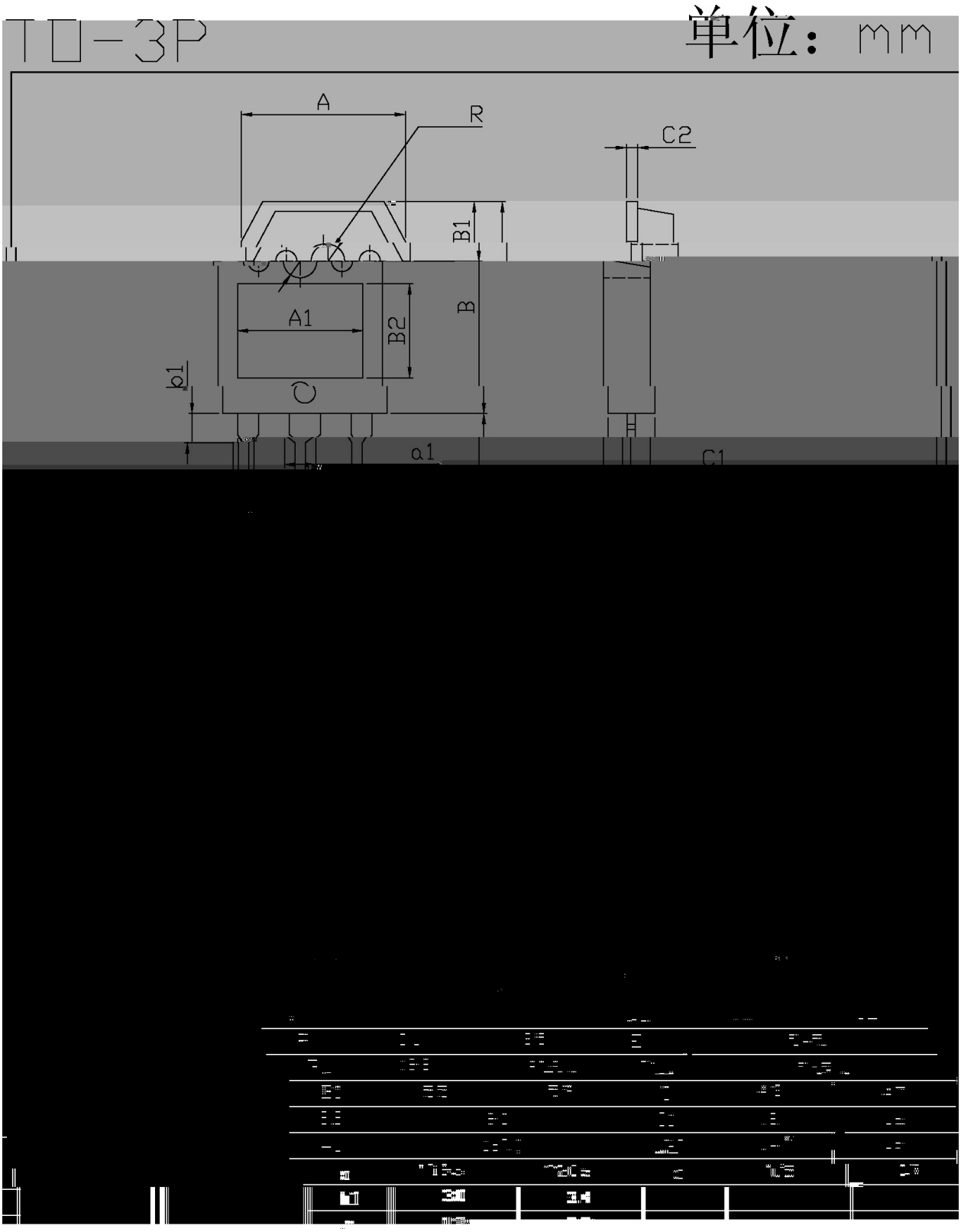
/Notes

1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip.

## / Electrical Characteristic Curve



## / Package Dimensions



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



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | 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. | |

## / Resistance to Soldering Heat Test Conditions

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