## / Descriptions

Schottky Diode in a TO-252 Plastic Package.

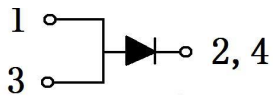
## / Features

High Forward Surge Capability, Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

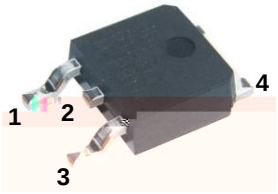
## / Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

## / Equivalent Circuit




## / Pinning




PIN1 Anode PIN 2,4 Cathode PIN 3 Anode

## / $h_{FE}$ Classifications & Marking

See Marking Instructions.

## / 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>$V_{RSM}$<br>$V_{DC}$ | 100 | V |
| RMS Reverse Voltage | $V_{RMS}$ | 70 | V |
| Average forward rectified current | $I_{F(AV)}$ | 1×10 | A |
| Non Repetitive Peak Surge Current | $I_{FSM}$ | 200 | A |
| Thermal Resistance Junction to Case | $R_{\theta Jc}$ | 2.0 | /W |
| Junction and Storage Temperature Range | $T_j$ $T_{stg}$ | -55 +150 | |

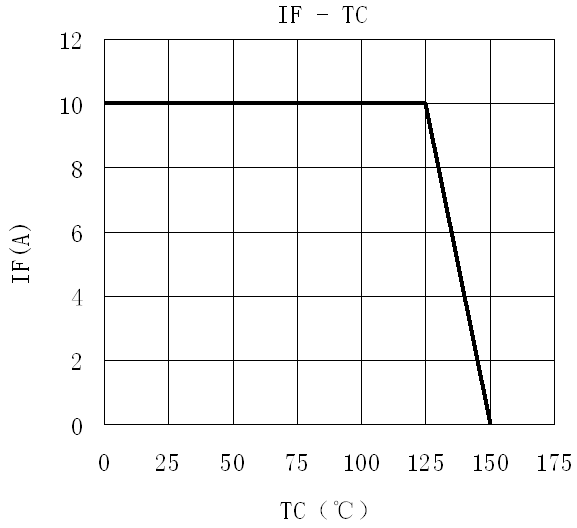
## / Electrical Characteristics(Ta=25 )

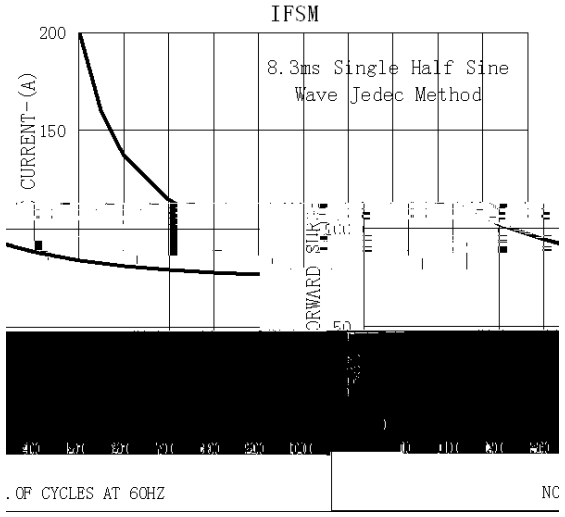
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse Voltage | $V_{(BR)R}$ | $I_R$=1mA(Ta=25 ) | 100 | | | V |
| Forward Voltage | $V_F$ | $I_F$ =2A(Ta=25 ) | | 0.41 | 0.45 | V |
| | | $I_F$ =10A(Ta=25 ) | | 0.58 | 0.65 | V |
| | | $I_F$ =2A(Ta=125 ) | | 0.31 | 0.40 | V |
| | | $I_F$ =10A(Ta=125 ) | | 0.55 | 0.65 | V |
| Instantaneous Reverse Current | $I_R$ Note 1 | $V_R$=100V(Ta=25 ) | | | 150 | μA |
| | | $V_R$=100V(Ta=125 ) | | | 25 | mA |

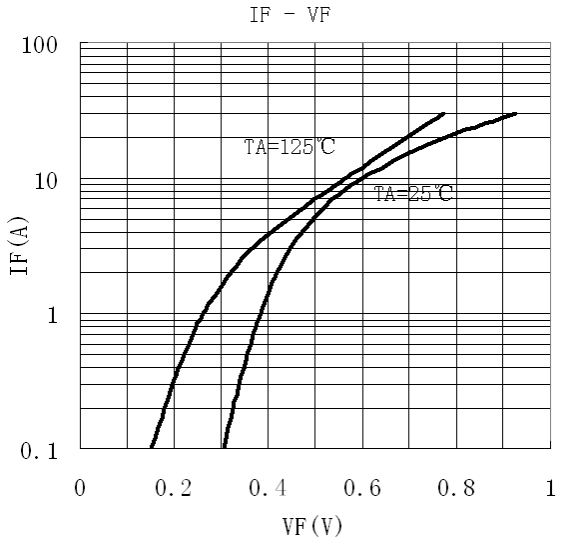
Short duration pulse test used to minimize self-heating effect.

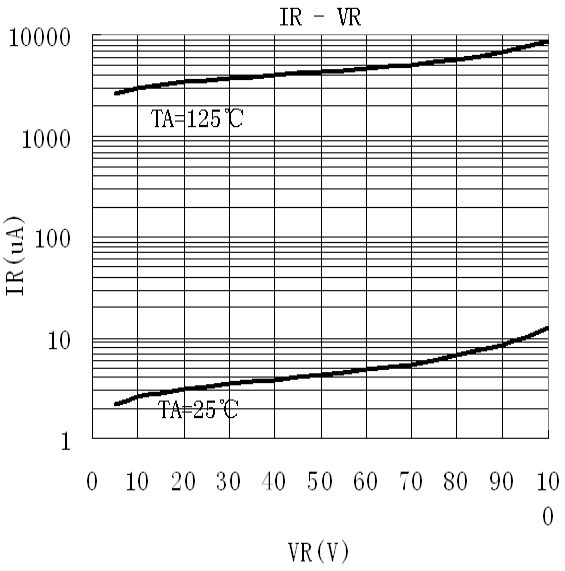
Unless otherwise noted, values for the parameters of a single chip

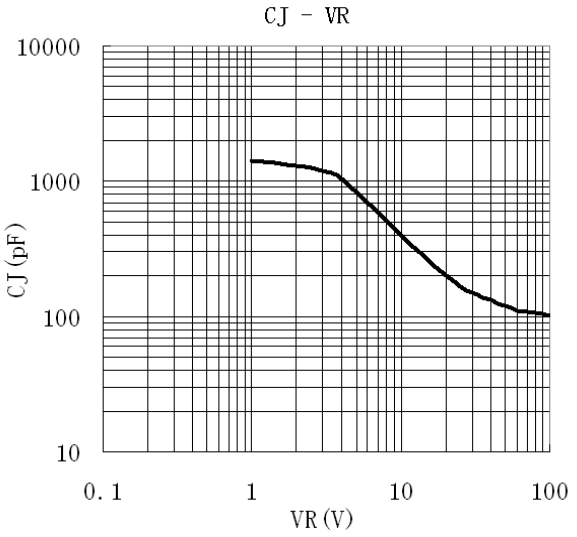
## / Electrical Characteristic Curve



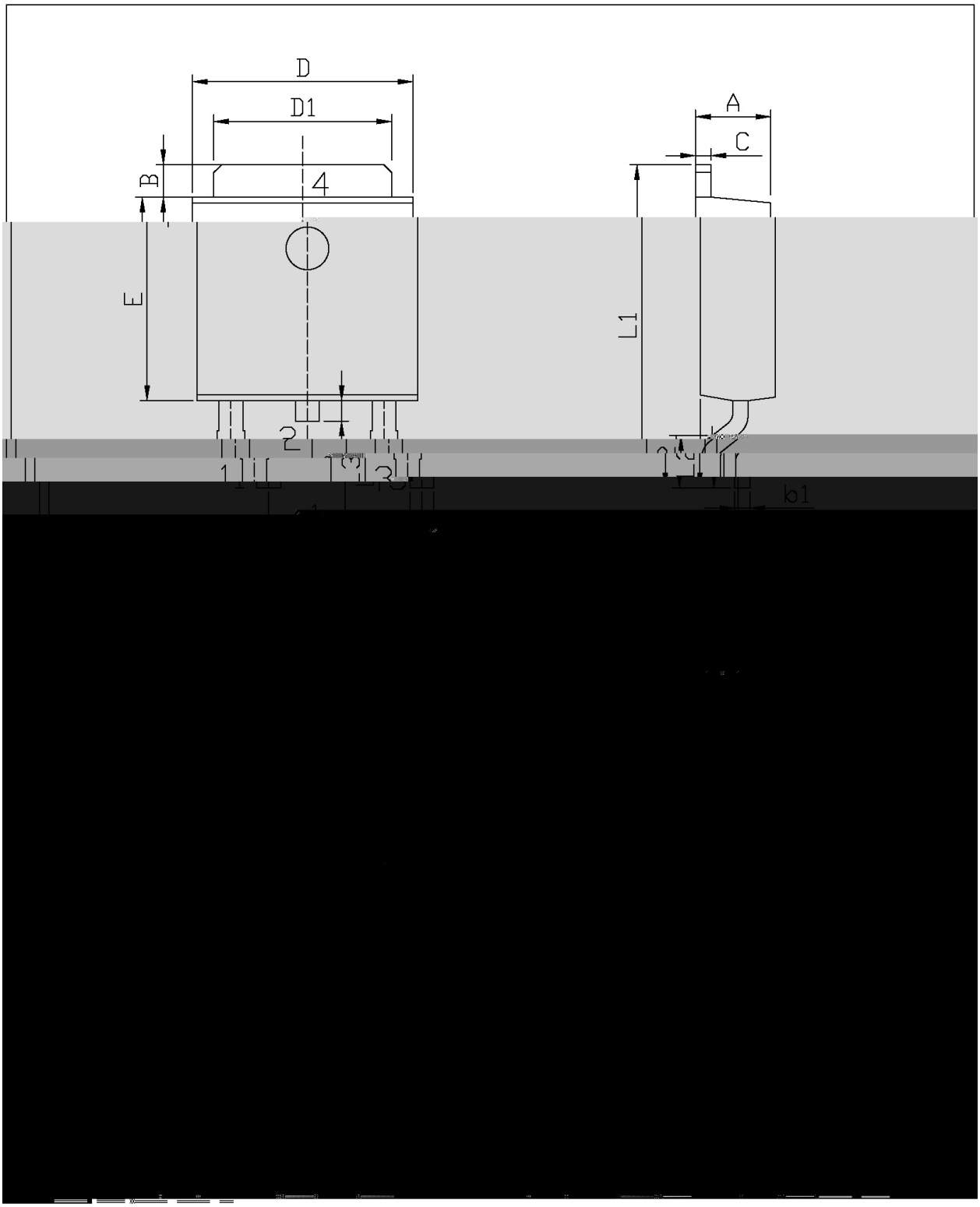



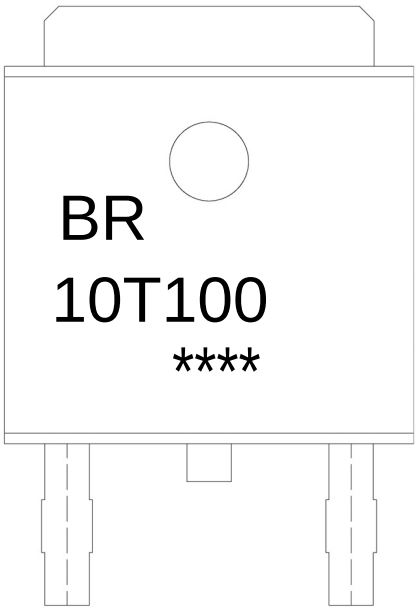



## / Package Dimensions



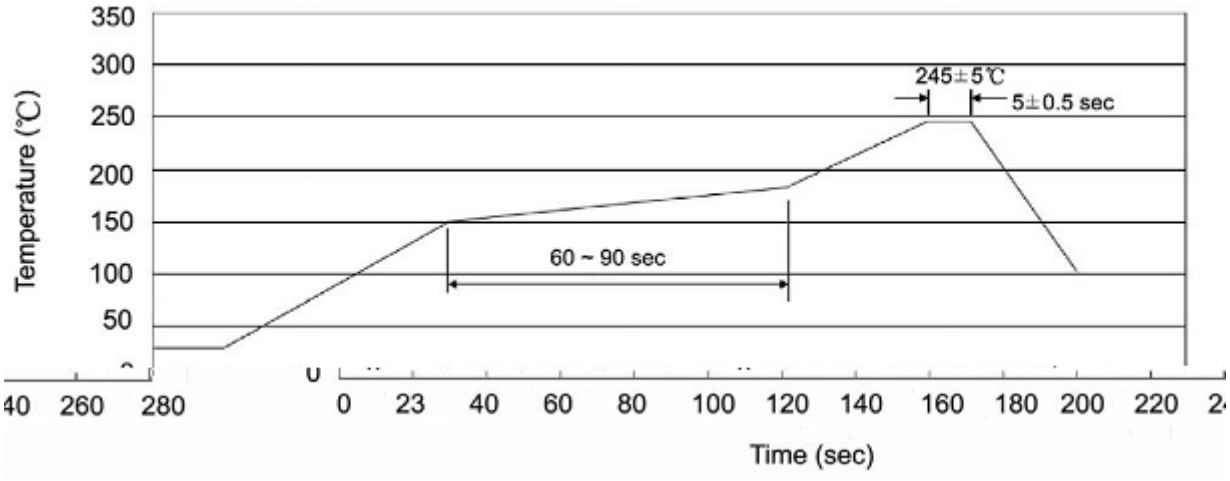
## / Marking Instructions




Note:

| | |
|---|---|
| BR: | Company Code |
| 10T100 | Product Type Code. |
| ****: | Lot No. Code, code change with Lot No. |

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




Note:

| | |
|---|---|
| 1 25 150 60 90sec; | 1.Preheating:25~150 , 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. |

## / Resistance to Soldering Heat Test Conditions 57)2173 6 1 Tf10.5 1114308TD TD0c0 T(w)