

# MBRD5100

Rev.E May.-2016

## / Descriptions

TO-252

Schottky diode in a TO-252 Plastic Package.

## / Features

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

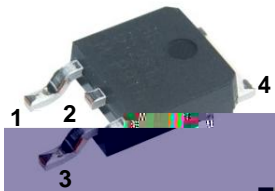
## / Applications

For Switching power supply, Converters, Free-Wheeling diodes, and Reverse battery protection.

## / Equivalent Circuit



## / Pinning



PIN1 Anode

PIN 2,4 Cathode

PIN 3 Anode

## / h<sub>FE</sub> Classifications & Marking

See Marking Instructions.

**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Average Rectified Forward Current 50% duty cycle @ $T_C = 105$	$I_{F(AV)}$	5.0	A
Non Repetitive Peak Surge Current	$I_{FSM}$	120	A
Junction Temperature Range	$T_j$	-55 150	
Storage Temperature Range	$T_{stg}$	-55 150	
Typical Thermal Resistance Junction to Ambient	$R_{JA}$	25	/W

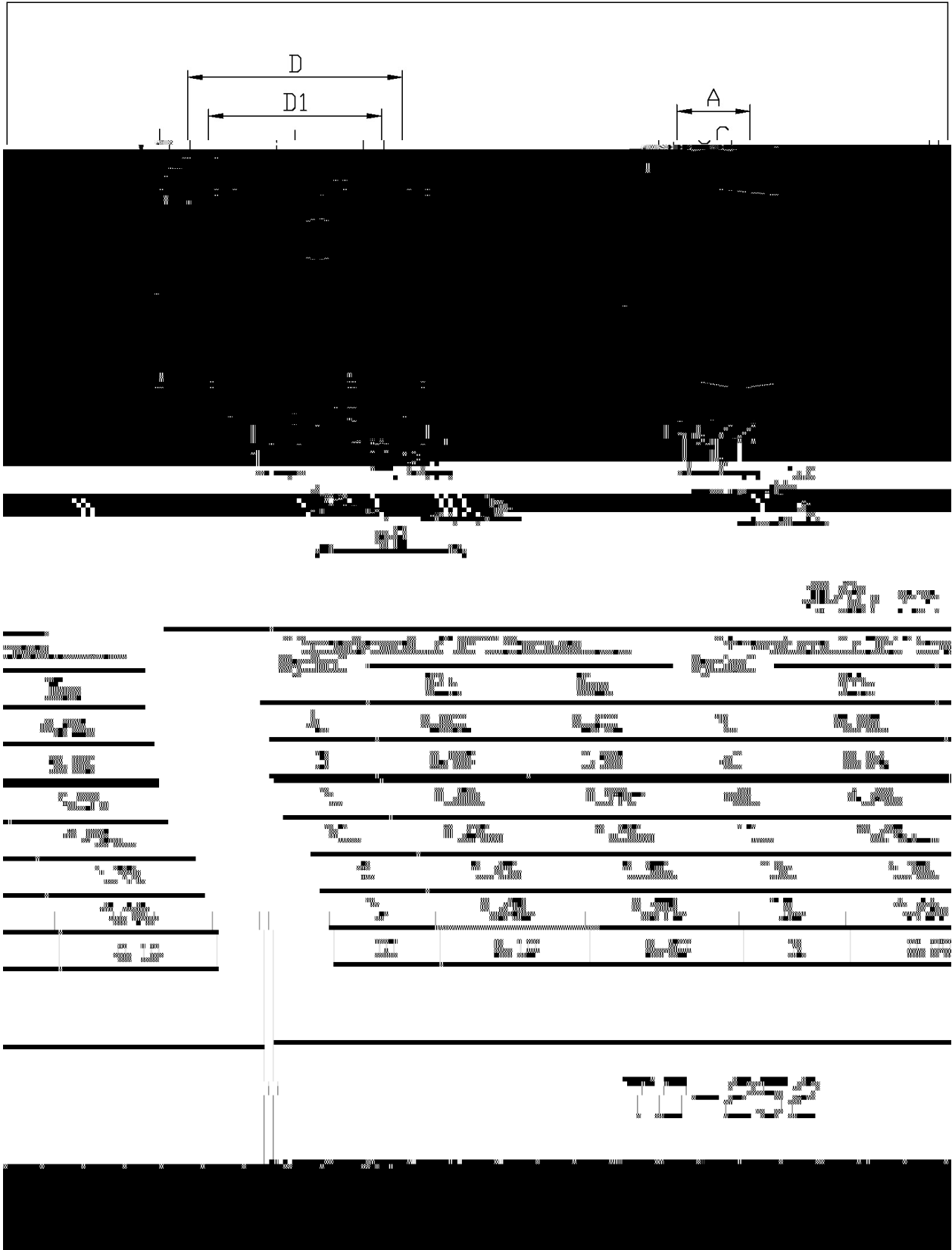
**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F=5A \quad T_J=25$			0.85	V
		$I_F=5A \quad T_J=125$			0.70	V
Instantaneous Reverse Current	$I_R$	$V_R=100V \quad T_J=25$			1.0	mA
		$V_R=100V \quad T_J=125$			10	mA

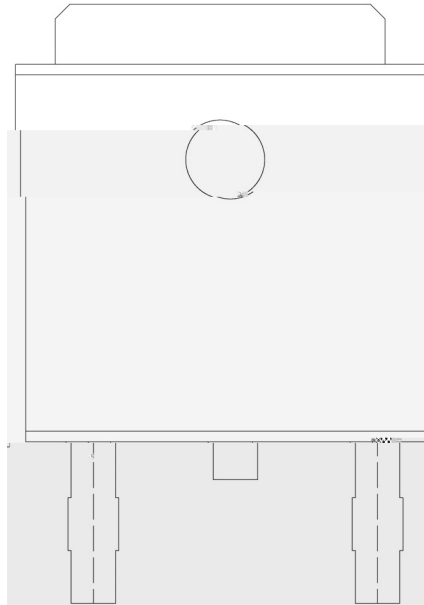
\*Pulse Width < 300 $\mu$ s, Duty Cycle <2%



**/ Package Dimensions**



**/ Marking Instructions**

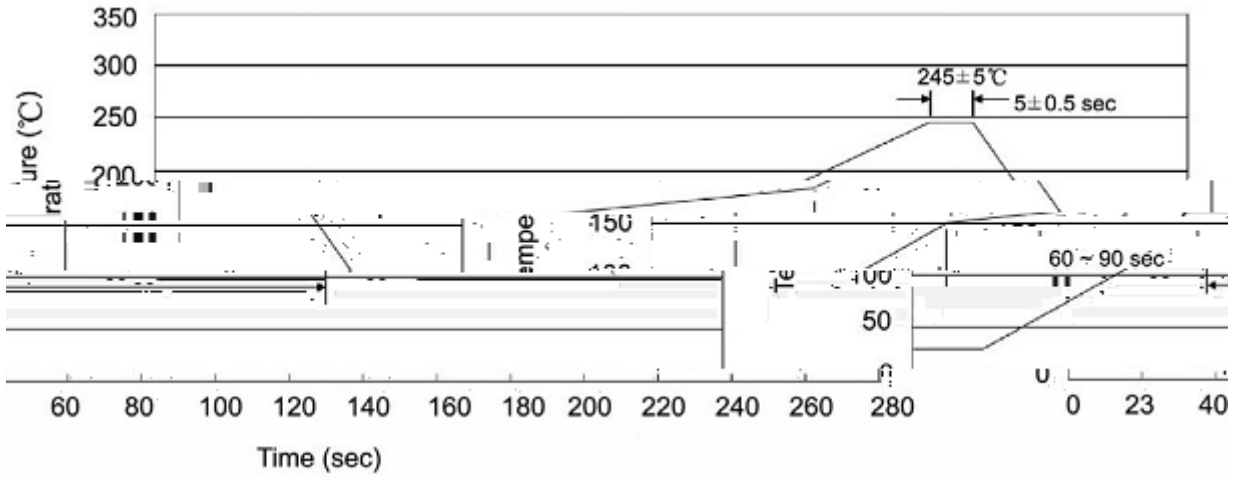


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**Note:**

BR:                      Company Code  
5100

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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.                                      |