

# MBRD20100CT

## Power Schottky Rectifier - 20Amp 100Volt

### ◆ Features:

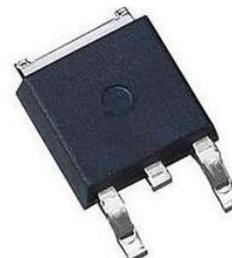
- ◇ High switching frequency  
开关频率高
- ◇ Low forward voltage drop  
正向压降低
- ◇ High efficiency and low power loss  
高效低功耗
- ◇ High volume of current and good capability of surge current  
大电流浪涌能力强

### ◆ Applications

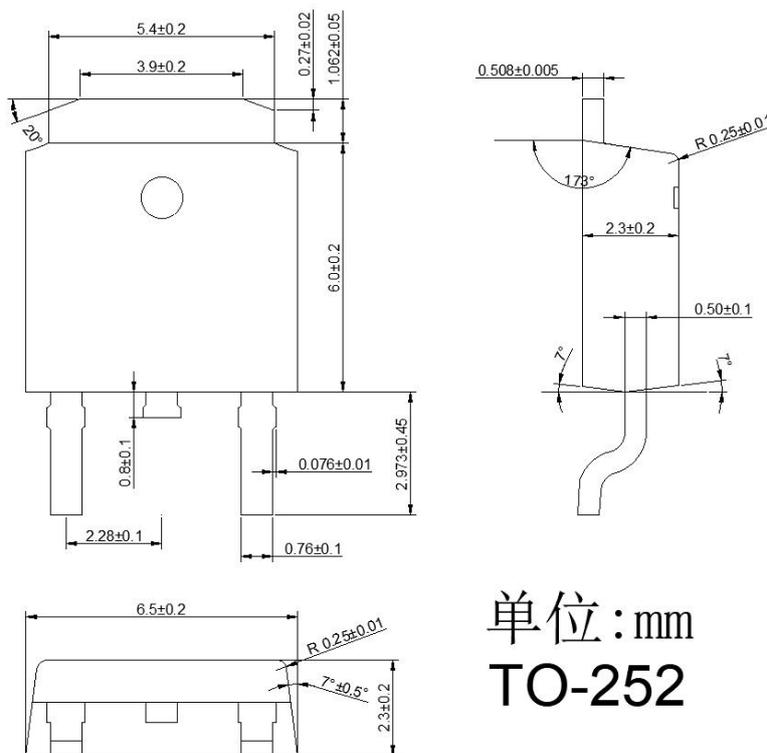
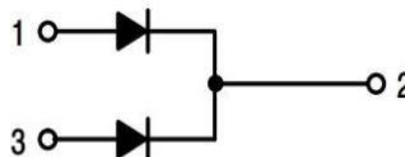
- ◇ High frequency rectifier of switching mode power supplies  
高频整流器开关电源
- ◇ Freewheeling diodes  
续流二极管
- ◇ Polarity protection application  
极性保护应用
- ◇ DC-DC converters  
直流-直流变换器

RoHS  
COMPLIANT

TO-252



### PIN CONNECTIONS



**◆ Absolute Maximum Ratings (Tc=25°C)**

Symbol	Parameters	Ratings	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage 最大反向重复峰值电压	<b>100</b>	V
V <sub>RWM</sub>	Working peak reverse voltage 反向峰值工作电压	<b>100</b>	V
V <sub>R</sub>	Maximum DC blocking voltage 最大直流反向电压	<b>100</b>	V
I <sub>F(AV)</sub>	Maximum average forward rectified current Total device 最大正向平均电流	<b>20</b>	A
I <sub>FSM</sub>	Peak Forward Surge Current 正向峰值浪涌电流	<b>150</b>	A
T <sub>j</sub>	Operating junction temperature range 结温	<b>175</b>	°C
T <sub>stg</sub>	Storage temperature range 贮存温度	<b>-55~175</b>	°C

**◆ Electrical characteristics**

Symbol	Parameters	Min	Typical	Max	Units	Conditions
I <sub>R</sub>	Maximum Reverse Leakage Current (Note 1) 最大反向瞬态电流	--	--	<b>15</b>	uA	V <sub>R</sub> =V <sub>RRM</sub> T <sub>C</sub> = 25 °C
V <sub>F</sub>	Maximum Instantaneous Forward Voltage (Note 2) 最大瞬态正向压降	--	<b>0.83</b>	<b>0.85</b>	V	I <sub>F</sub> = 10 A, T <sub>C</sub> = 25 °C
R <sub>th(j-c)</sub>	Typical Thermal Resistance, Junction to Case 结到外壳的典型热阻	--	--	<b>3.0</b>	°C/W	
dV/dt	Voltage Rate of Change 电压变化率	--	--	<b>10000</b>	V/μs	

Note 1: 2.0uS Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300us Pulse Width, 1% Duty Cycle