

**FEATURES**

- Common cathode structure
- Low power loss, high efficiency
- High Operating Junction Temperature
- Guard ring for overvoltage protection, Highreliability
- RoHS product

**APPLICATIONS**

- High frequency switch Power supply
- Free wheeling diodes, Polarity protection applications

**主要参数 MAIN CHARACTERISTICS**

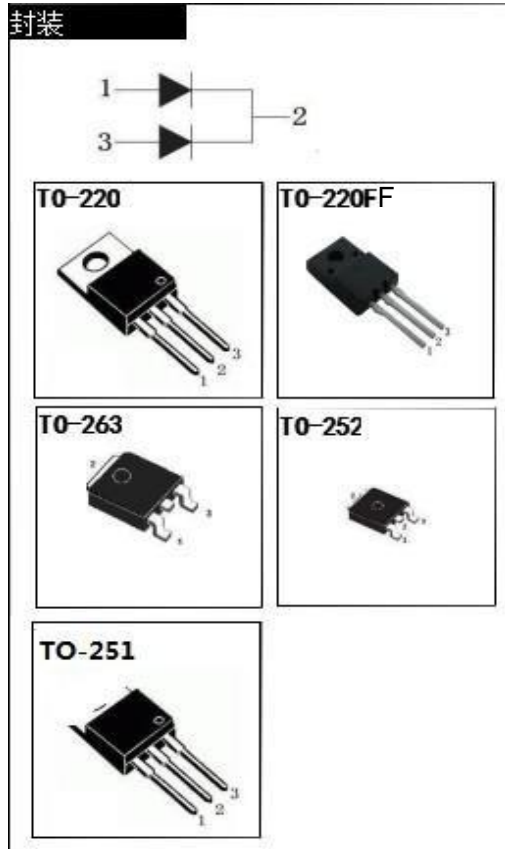
<b>I<sub>F(AV)</sub></b>	<b>20 (2×10) A</b>
<b>V<sub>F(max)</sub></b>	<b>0.8V (@T<sub>j</sub>=125℃)</b>
<b>T<sub>j</sub></b>	<b>175 ℃</b>
<b>V<sub>R(RM)</sub></b>	<b>200 V</b>

**产品特性**

- 共阴结构
- 低功耗, 高效率
- 良好的高温特性
- 有过压保护环, 高可靠性
- 环保 (RoHS) 产品

**用途**

- 高频开关电源
- 低压续流电路和保护电路



**产品型号信息 PRODUCT MESSAGE**

型号 Model	印记 Marking	封装 Package
MBR20200F	MBR20200F	TO-220FF
MBRF20200	MBRF20200	TO-220F
MBR20200S	MBR20200S	TO-263
MBR20200R	MBR20200R	TO-252
MBR20200V	MBR20200V	TO-251
MBR20200	MBR20200	TO-220C

# MBR20200F 肖特基二极管 SCHOTTKY DIODE

## 绝对最大额定值 ABSOLUTE RATINGS (Tc=25°C)

项 目 Parameter		符 号 Symbol	数 值 Value	单 位 Unit
最大反向重复峰值电压 Repetitive peak reverse voltage		$V_{RRM}$	200	V
最大直流阻断电压 Maximum DC blocking voltage		$V_{DC}$	200	V
正向平均整流电流 Average forward current	$T_C=125^\circ\text{C}$	$I_{F(AV)}$	20	A
	整个器件 per device  单 侧 per diode		10	
正向峰值浪涌电流 Surge non repetitive forward current (额定负载 8.3ms 半正弦波—按 JEDEC 方法) 8.3 ms single half-sine-wave (JEDEC Method)		$I_{FSM}$	230	A
最高结温 Maximum junction temperature		$T_j$	175	°C
储存温度 Storage temperature range		$T_{STG}$	-40~+150	°C

## 电特性 ELECTRICAL CHARACTERISTICS

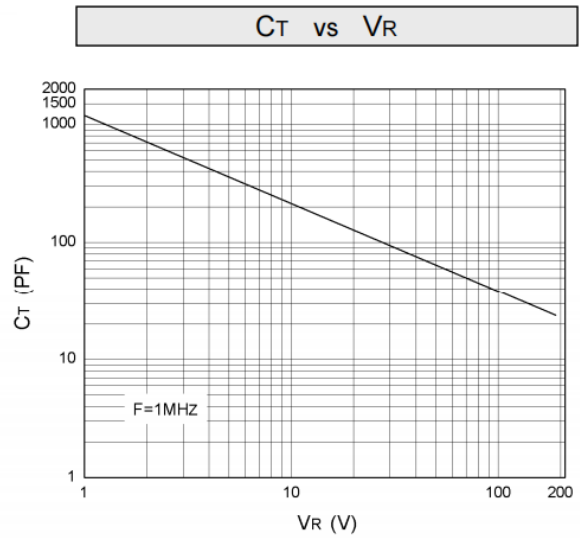
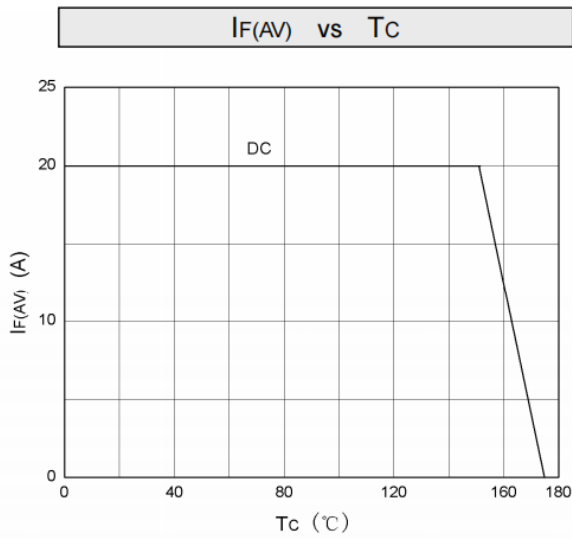
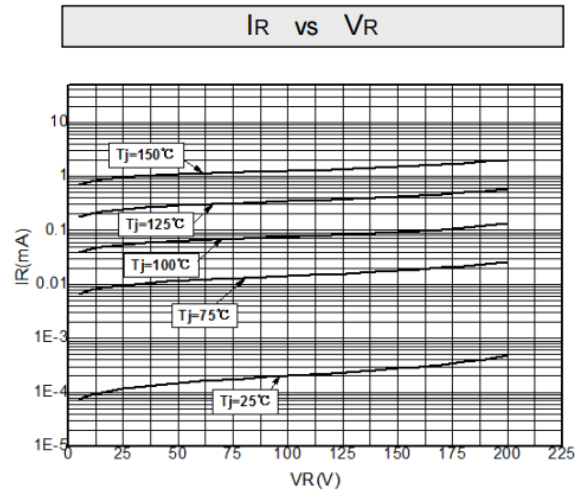
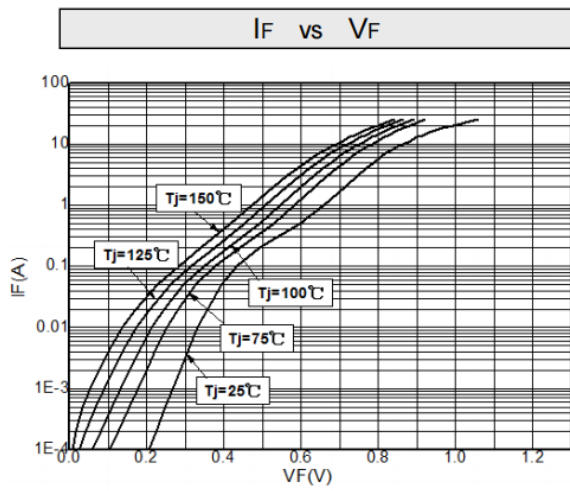
项 目 Parameter	测试条件 Tests conditions		最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
$I_R$	$T_j = 25^\circ\text{C}$	$V_R = V_{RRM}$			10	$\mu\text{A}$
	$T_j = 125^\circ\text{C}$				5	mA
$V_F$	$T_j = 25^\circ\text{C}$	$I_F = 10\text{A}$		0.87	0.92	V
	$T_j = 125^\circ\text{C}$			0.72	0.80	V

## 热特性 THERMAL CHARACTERISTICS

项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal resistance from junction to case	$R_{th(j-c)}$		3.0	°C/W

# MBR20200F 肖特基二极管 SCHOTTKY DIODE

## 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

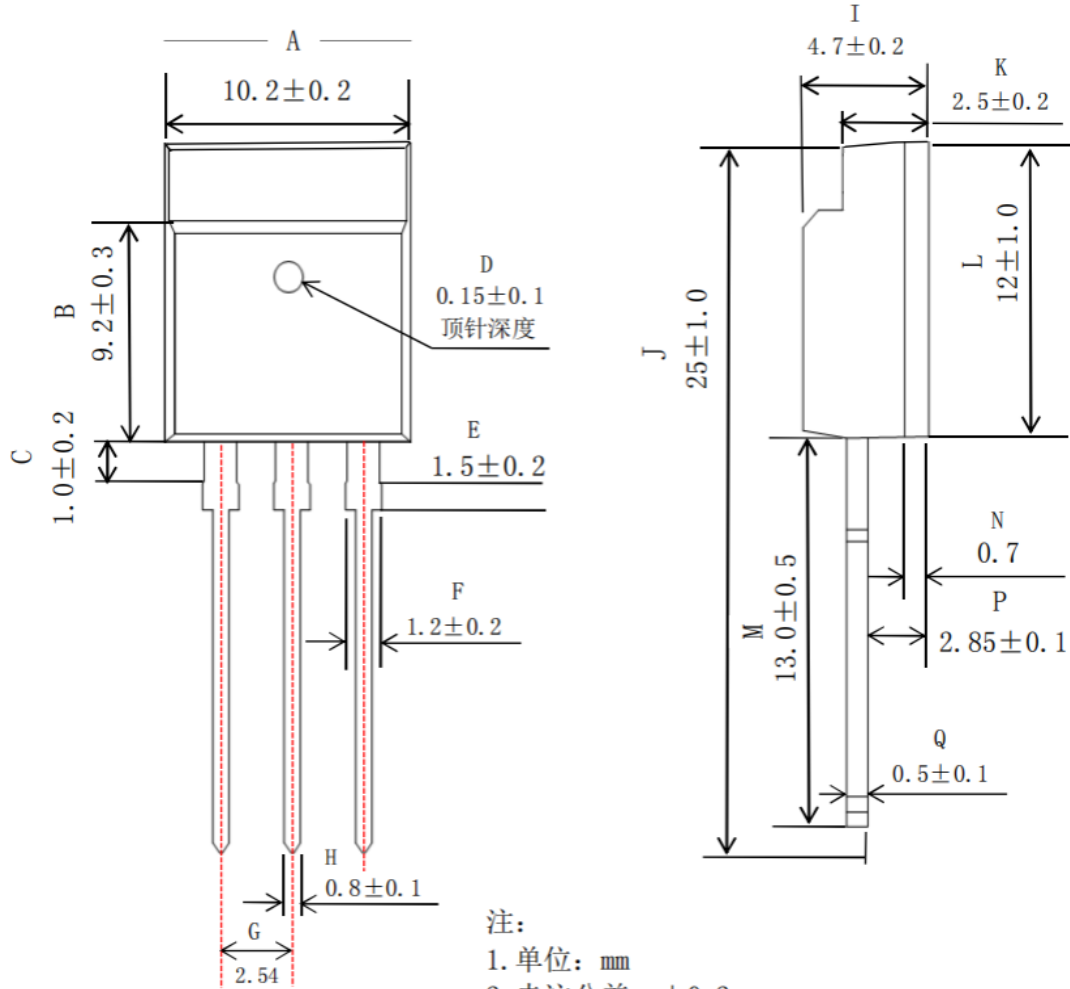


# MBR20200F 肖特基二极管 SCHOTTKY DIODE

## 外形尺寸 PACKAGE MECHANICAL DATA

单位 Unit : mm

### TO-220FF



注:

1. 单位: mm

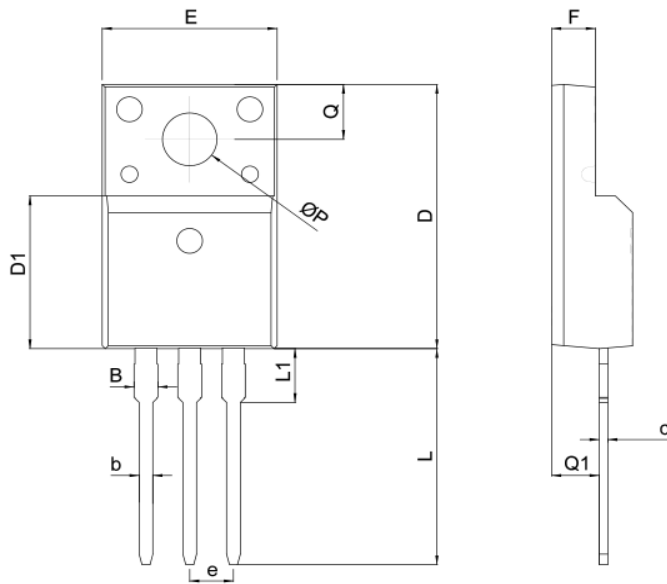
2. 未注公差:  $\pm 0.2\text{mm}$

(除非另有说明)

# MBR20200F 肖特基二极管 SCHOTTKY DIODE

外形尺寸 PACKAGE MECHANICAL DATA  
**TO-220F**

单位 Unit : mm



SYMBOL	mm	
	MIN	MAX
A	4.5	4.9
B	1.22	1.47
b	0.7	0.9
c	0.45	0.60
D	15.6	16.1
D1	9.0	9.3
e	2.54TYPE	
E	9.9	10.4
F	2.3	2.8
L	12.6	13.3
L1	3.1	3.4
Q	3.2	3.4
Q1	2.6	2.9
$\Phi P$	3.0	3.5

