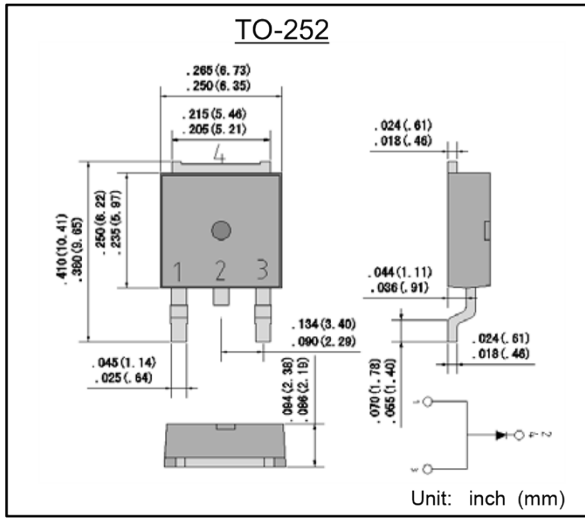


肖特基二极管  
反向电压 40 ~ 200 V  
正向电流 20 A

Schottky Barrier Rectifiers  
Reverse Voltage 40 ~ 200 V  
Forward Current 20 A



## 特征 Features

- 反向漏电流低 Low reverse leakage
- 正向浪涌承受能力强 High forward surge capability
- 高信赖性 High reliability
- 引线 and 管体皆符合RoHS标准  
Lead and body according with RoHS standard
- 型号后缀“-F”标记无卤素产品  
Green compound with suffix "-F" on Marking

## 机械数据 Mechanical Data

- 封装外形: TO-252 塑封 Case: TO-252 Molded plastic
- 环氧树脂: UL易燃等级: 94V-0  
Epoxy: UL 94V-0 rate flame retardant
- 引脚: 镀锡, 无铅 Lead: Pure tin plated, lead free
- 安装位置: 任意 Mounting Position: Any
- 安装扭矩: 推荐值 0.3牛\*米 Mounting torque: Recommend 0.3 N\*m

## 极限值和温度特性 TA = 25°C 除非另有规定。 Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	MBRS 2040	MBRS 2045	MBRS 2050	MBRS 2060	MBRS 2080	MBRS 20100	MBRS 20150	MBRS 20200	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	$V_{RRM}$	40	45	50	60	80	100	150	200	V
最大均方根电压 Maximum RMS voltage	$V_{RMS}$	28	31.5	35	42	56	70	105	140	V
最大直流阻断电压 Maximum DC blocking voltage	$V_{DC}$	40	45	50	60	80	100	150	200	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	20.0								A
正向不重复浪涌电流 8.3 ms 单一正弦半波 8.3 ms single half sine-wave Non-repetitive peak forward surge current	$I_{FSM}$	150								A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	4								°C/W
工作结温和存储温度 Operating junction and storage temperature range	$T_j, T_{STG}$	-55 --- +150								°C

备注 Note:

- 安装在PCB板上, 从PN结到管体的热阻。  
1) Thermal resistance from junction to case, PCB mounted.

## 电特性 TA = 25°C 除非另有规定。

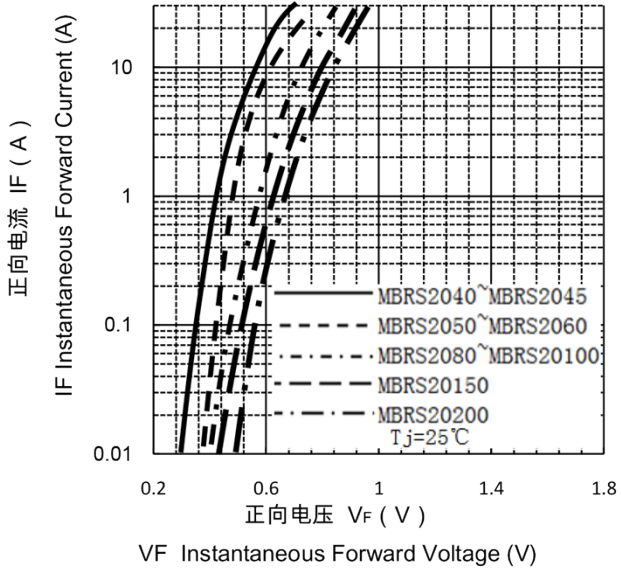
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	MBRS 2040	MBRS 2045	MBRS 2050	MBRS 2060	MBRS 2080	MBRS 20100	MBRS 20150	MBRS 20200	单位 Unit
最大正向电压 @IF=20.0A Maximum forward voltage	$V_F$	0.70		0.80		0.85		0.95	0.99	V
最大反向电流 @V <sub>DC</sub> TA = 25°C Maximum reverse current	$I_R$	100				50				uA

特性曲线 Characteristic Curves

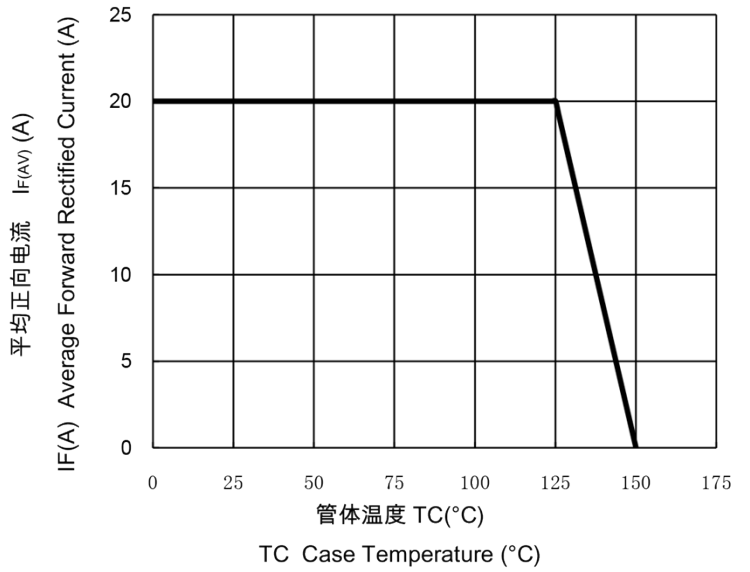
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



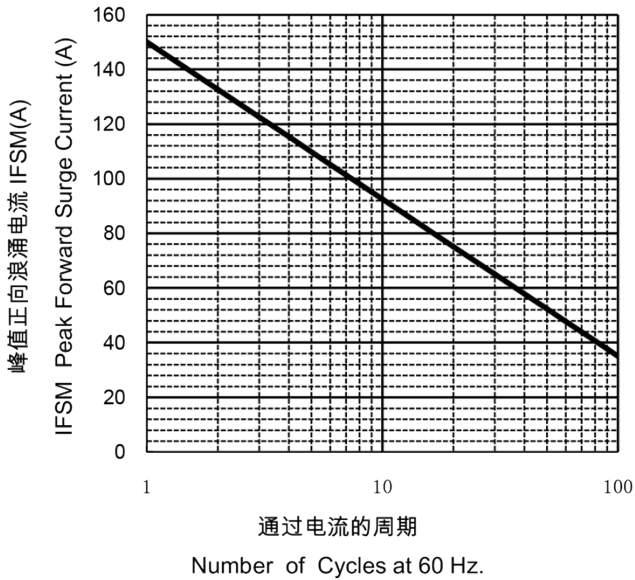
正向电流降额曲线

FORWARD CURRENT DERATING CURVE



浪涌特性曲线 (最大值)

MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



反向特性曲线

TYPICAL REVERSE CHARACTERISTICS

