



肖特基二极管  
反向电压 100 V  
正向电流 40 A

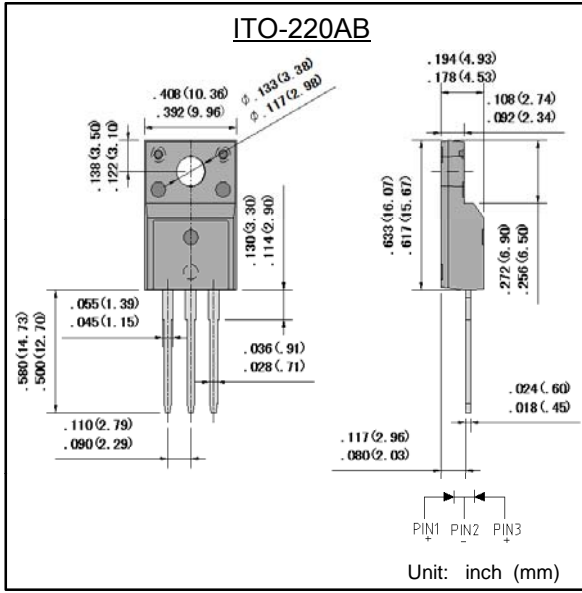
Schottky Barrier Rectifiers  
Reverse Voltage 100 V  
Forward Current 40 A

## 特征 Features

- 沟槽工艺 Trench schottky technology
- 低正向压降 Low forward voltage
- 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: ITO-220AB 塑封 Case: ITO-220AB 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	TBRF40100CT	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
最大均方根电压 Maximum RMS voltage	$V_{RMS}$	70	V
最大直流阻断电压 Maximum DC blocking voltage	$V_{DC}$	100	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	40.0	A
正向不重复浪涌电流 8.3 ms单一正弦半波 Non-repetitive peak forward surge current 8.3 ms single half sine-wave	$I_{FSM}$	250	A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	4	°C/W
工作结温 Operating junction temperature	$T_j$	150	°C
存储温度 Storage temperature range	$T_{STG}$	-55 --- +150	°C

备注 Note:

1) 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	TBRF40100CT	单位 Unit
最大正向电压 @IF=3.0A Maximum forward voltage	$V_F$	0.48	V
最大正向电压 @IF=20.0A Maximum forward voltage	$V_F$	0.70	V
最大反向电流 @V <sub>DC</sub> Maximum reverse current	$I_R$	50	uA

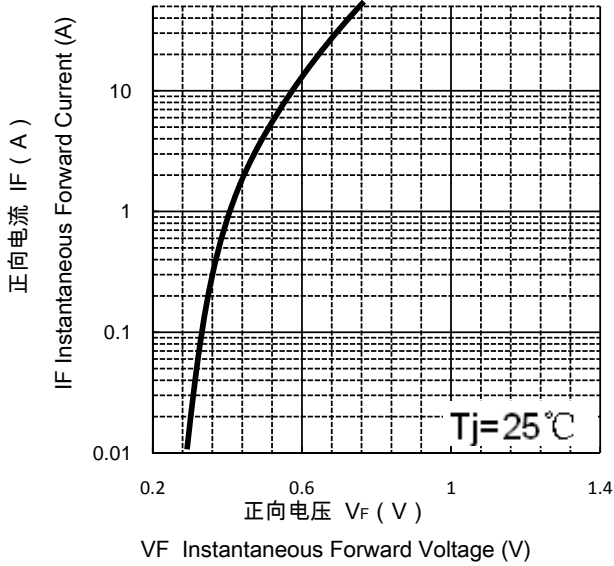
TA= 25°C



## 特性曲线 Characteristic Curves

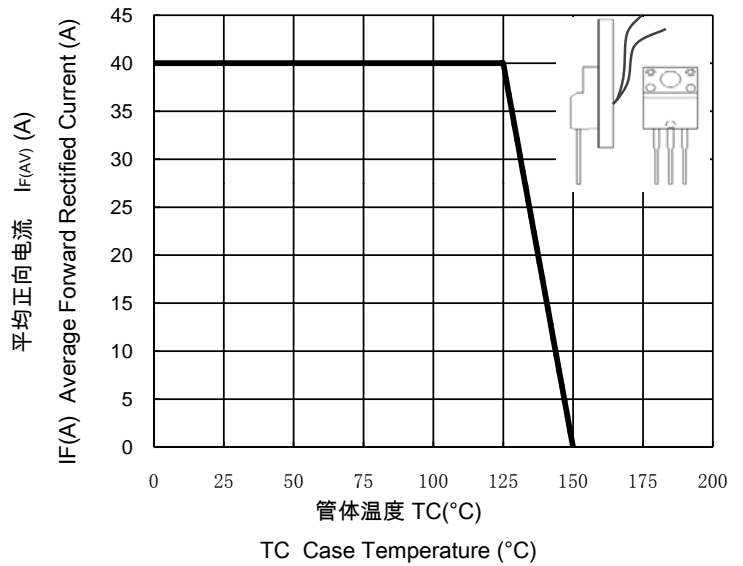
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



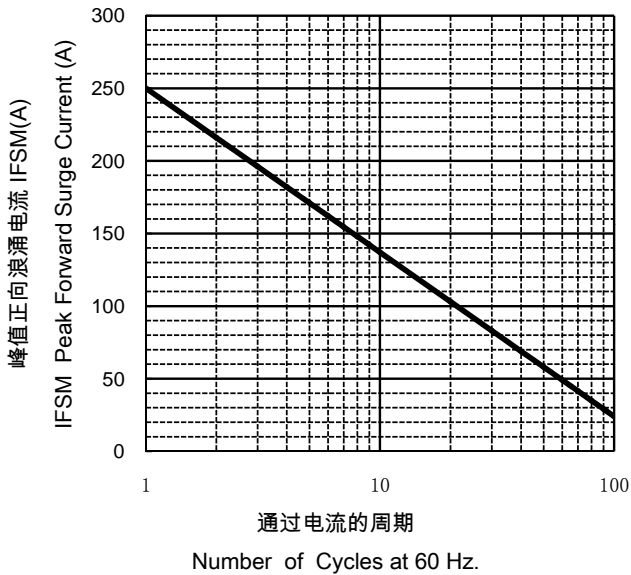
正向电流降额曲线

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

