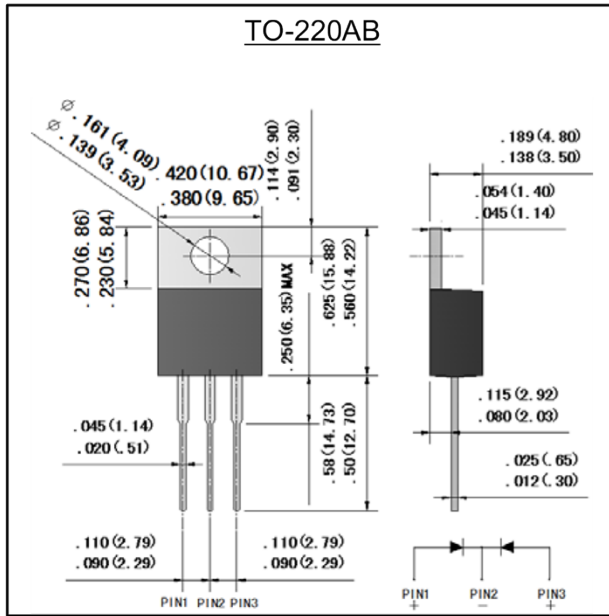


肖特基二极管  
反向电压 80 V  
正向电流 30 A

Schottky Barrier Rectifiers  
Reverse Voltage 80 V  
Forward Current 30 A



### 特征 Features

- 沟槽工艺 Trench schottky technology
- 反向漏电流低 Low reverse leakage
- 正向压降低 Low forward voltage
- 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-220AB 塑封 Case: TO-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  $T_A = 25^\circ\text{C}$  除非另有规定。  
Maximum Ratings & Thermal Characteristics

Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	TBR3080CT	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	$V_{RRM}$	80	V
最大均方根电压 Maximum RMS voltage	$V_{RMS}$	56	V
最大直流阻断电压 Maximum DC blocking voltage	$V_{DC}$	80	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	30.0	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 singlehalf sine-wave	$I_{FSM}$	200	A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	2	$^\circ\text{C}/\text{W}$
工作结温 Junction temperature	$T_j$	150	$^\circ\text{C}$
存储温度 Storage temperature range	$T_{STG}$	-55 --- +150	$^\circ\text{C}$

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.

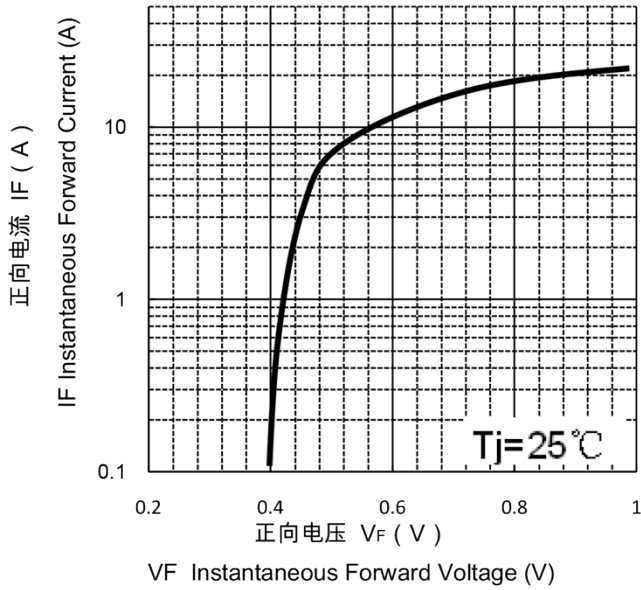
电特性  $T_A = 25^\circ\text{C}$  除非另有规定。  
Electrical Characteristics Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	TBR3080CT	单位 Unit
最大正向电压 @ $I_F=3.0\text{A}$ Maximum forward voltage	$V_F$	0.50	V
最大正向电压 @ $I_F=15.0\text{A}$ Maximum forward voltage	$V_F$	0.68	V
最大反向电流 @ $V_{DC}$ $T_A = 25^\circ\text{C}$ Maximum reverse current	$I_R$	100	$\mu\text{A}$

特性曲线 Characteristic Curves

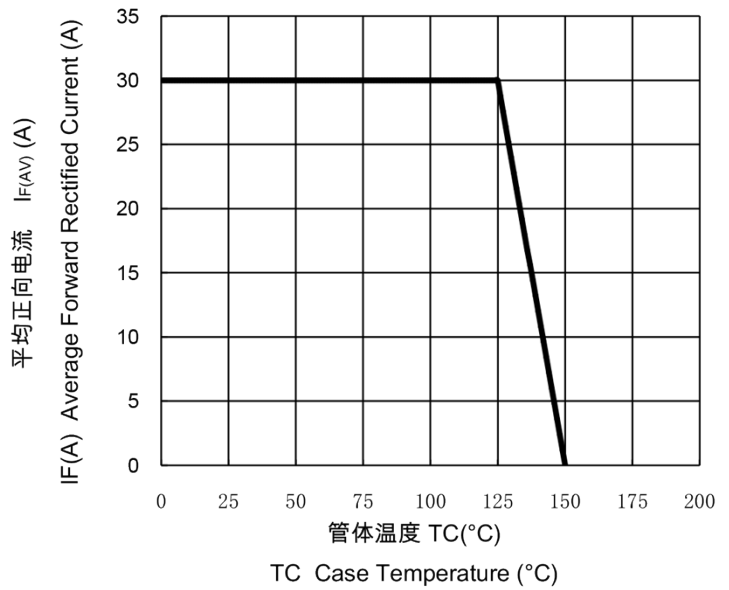
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



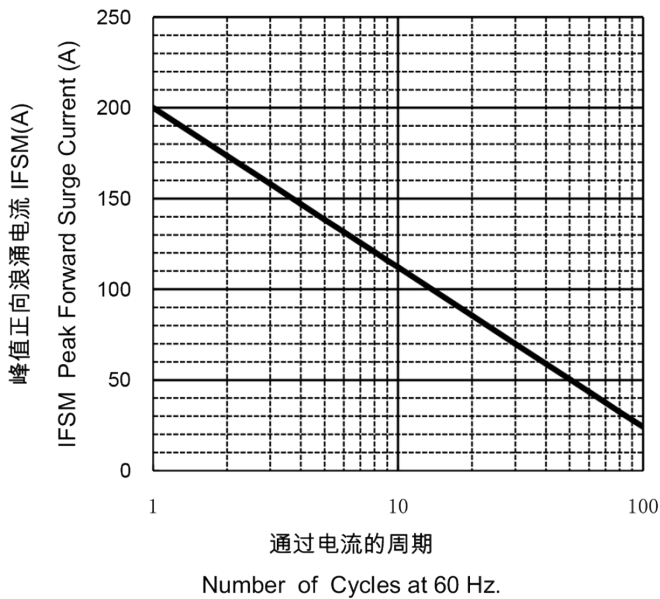
正向电流降额曲线

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

