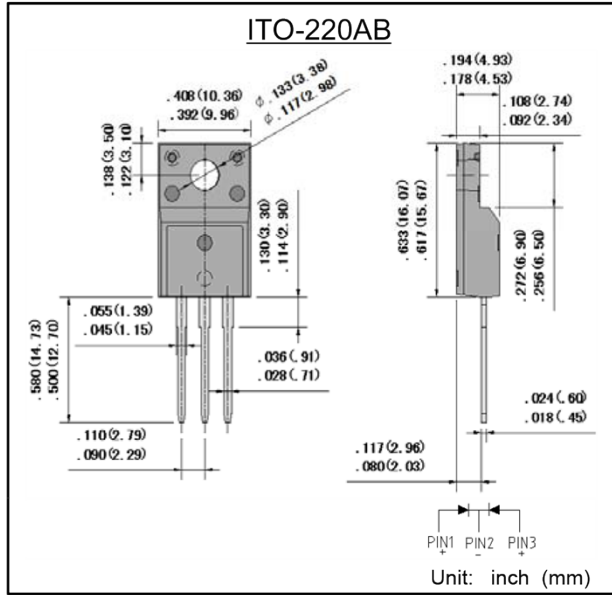


肖特基二极管
反向电压 45 V
正向电流 20 A

Schottky Barrier Rectifiers
Reverse Voltage 45 V
Forward Current 20 A



特征 Features

- 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
- 超势垒 Mos planar
- 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 $T_A = 25^\circ\text{C}$ 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	SBRF2045CT	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	45	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	31.5	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	45	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 Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	150	A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	4	$^\circ\text{C/W}$
最高工作结温 Maximum operating 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。

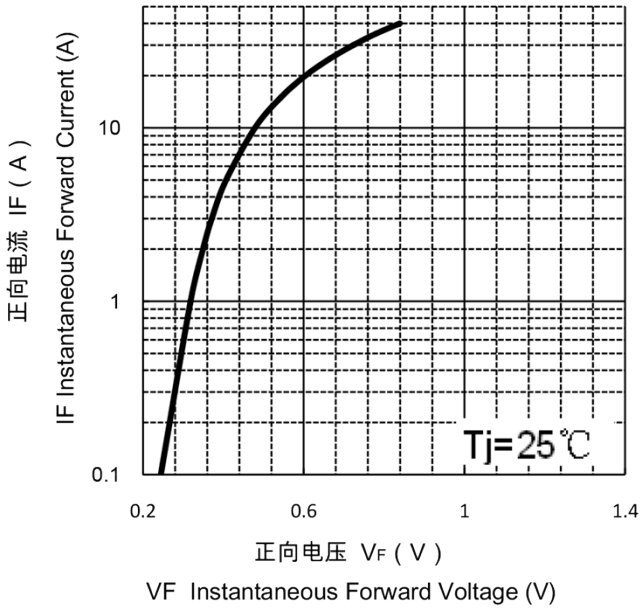
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	SBRF2045CT	单位 Unit
最大正向电压 @ $I_F=3.0\text{A}$ Maximum forward voltage	V_F	0.38	V
最大正向电压 @ $I_F=10.0\text{A}$ Maximum forward voltage	V_F	0.54	V
最大反向电流 @ V_{DC} $T_A = 25^\circ\text{C}$ Maximum reverse current	I_R	500	μA

特性曲线 Characteristic Curves

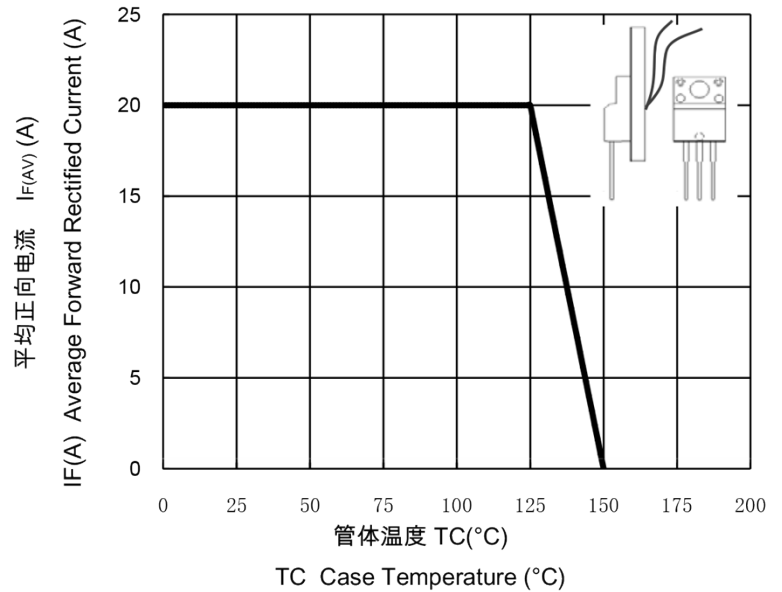
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



正向电流降额曲线

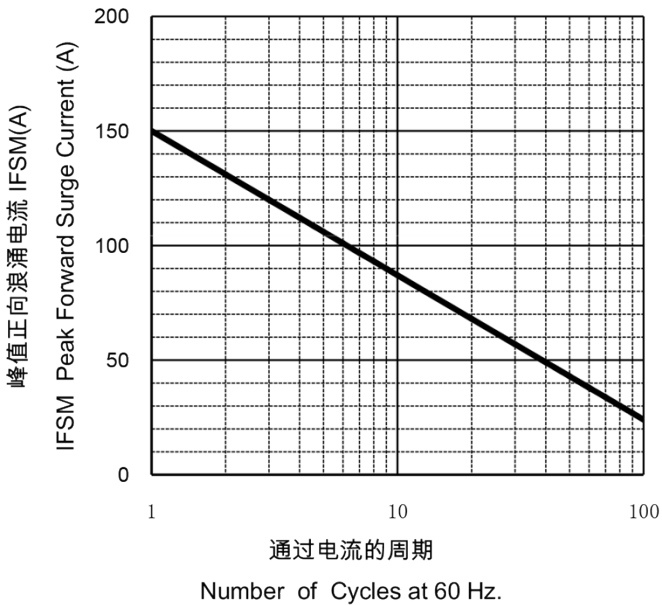
FORWARD CURRENT DERATING CURVE



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

