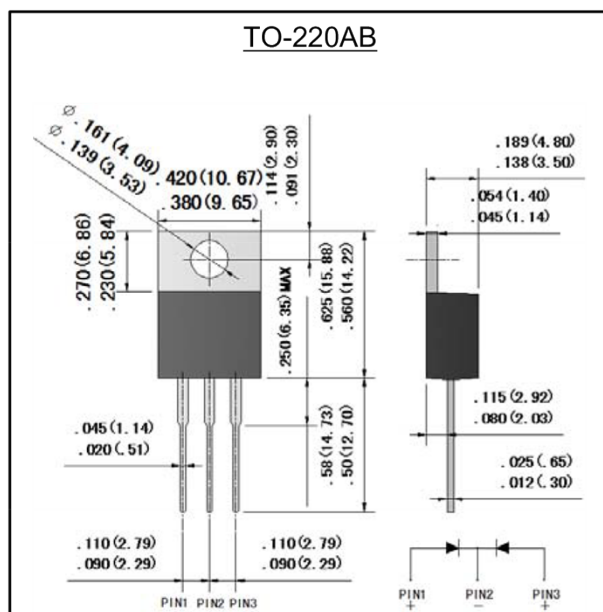


肖特基二极管
反向电压 100 V
正向电流 40 A

Schottky Barrier Rectifiers
Reverse Voltage 100 V
Forward Current 40 A



特征 Features

- 沟槽工艺 Trench schottky technology
- 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 0.3N·m 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	TBR40100CT	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 singlehalf sine-wave	I_{FSM}	250	A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	2	°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。

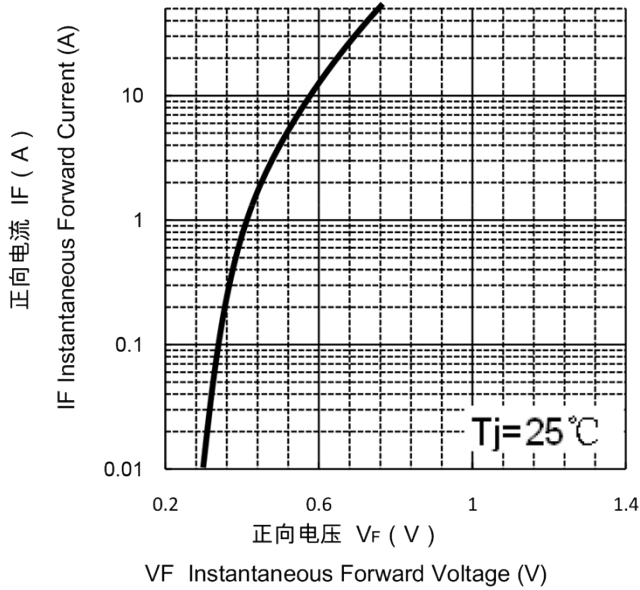
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	TBR40100CT	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 _{DC} TA= 25°C Maximum reverse current	I _R	50	uA

特性曲线 Characteristic Curves

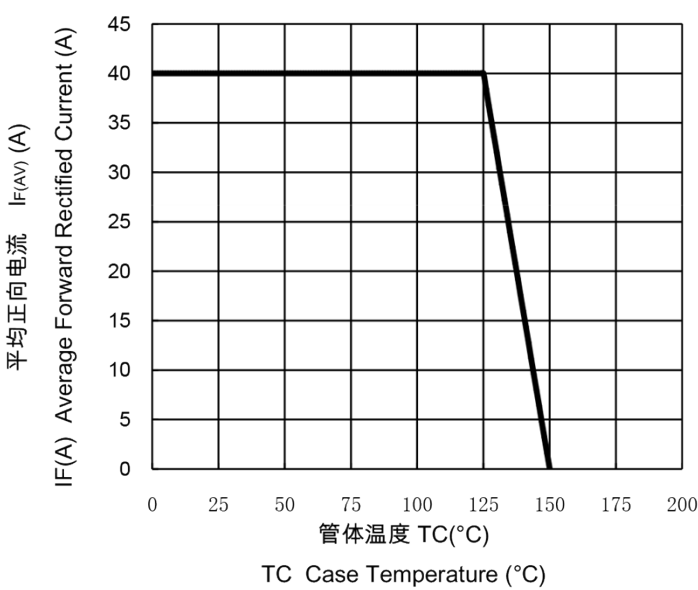
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



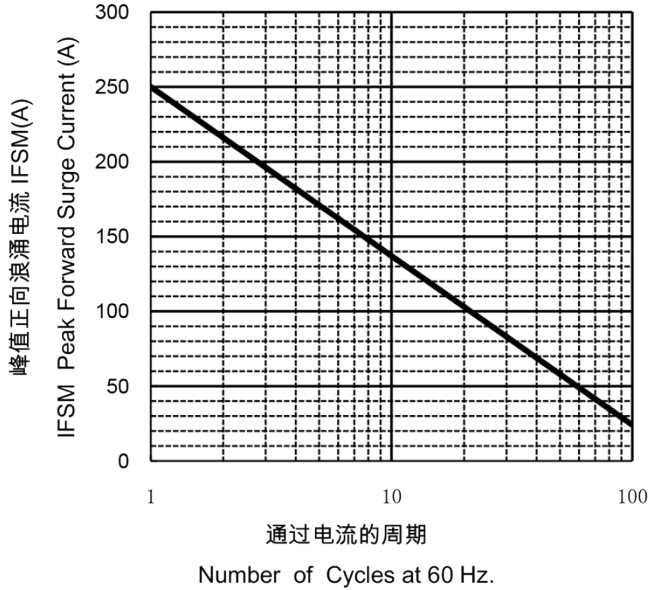
正向电流降额曲线

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

