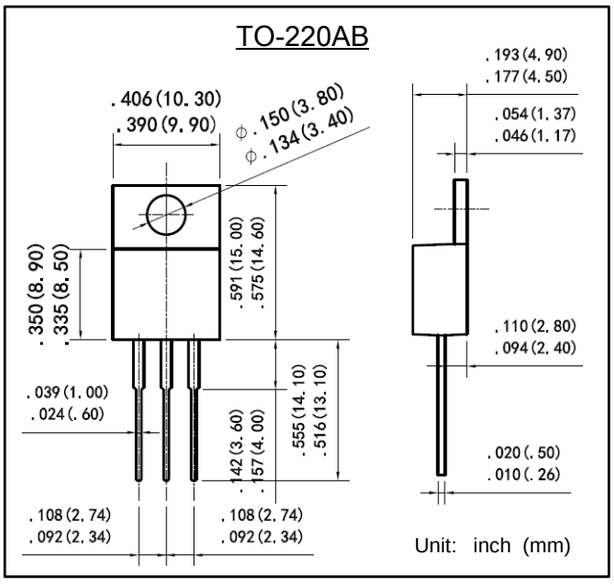
MBR3040CT-MBR30200CT

肖特基二极管
反向电压 40 ~ 200 V
正向电流 30 A

Schottky Barrier Rectifiers
Reverse Voltage 40 ~ 200 V
Forward Current 30 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
- 引线和管体皆符合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
- 安装扭距: 推荐值 0.3牛*米 Mounting torque：Recommend 0.3 N*m

最大值和特性 TA = 25℃ 除非另有规定。
Maximum Ratings & Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	MBR 3040CT	MBR 3045CT	MBR 3050CT	MBR 3060CT	MBR 3080CT	MBR 30100CT	MBR 30150CT	MBR 30200CT	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	$I_{F(AV)}$	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}	150								A
最大正向电压 @IF=15.0A Maximum forward voltage	V_F	0.60		0.75		0.85		0.95	0.99	V
最大反向电流 @V_{DC} TA= 25℃	I_R	100				50				uA
Maximum reverse current TA= 100℃		20				10				mA
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	4								℃/W
典型结电容 VR=4.0V,f=1MHz Type junction capacitance	C_J	310								pF
工作结温和存储温度 Operating junction and storage temperature rang	T_J, T_{STG}	-55 --- +150								℃

备注 Note:

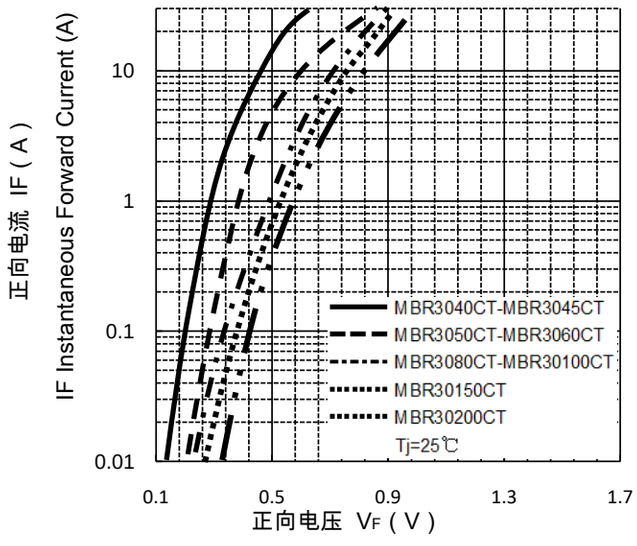
1) 安装在PCB板上，从PN结到管体的热阻。

1) Thermal resistance from junction to case , PCB mounted.

特性曲线 Characteristic Curves

正向特性曲线（典型值）

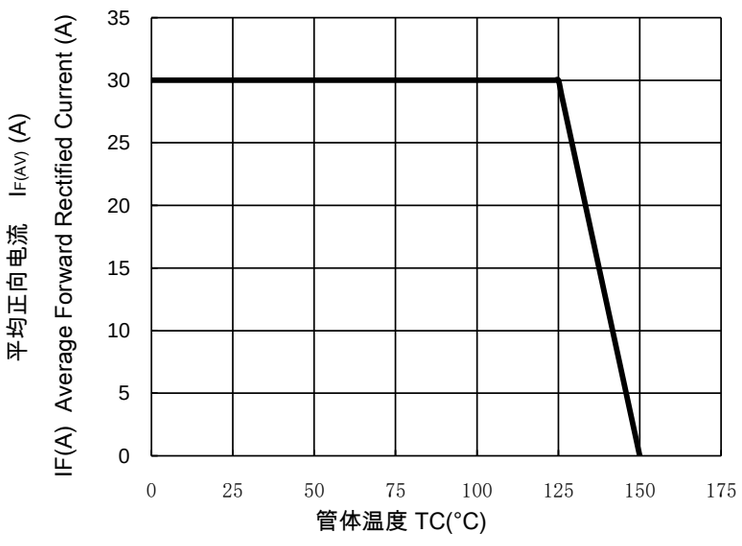
TYPICAL FORWARD CHARACTERISTIC



VF Instantaneous Forward Voltage (V)

正向电流降额曲线

FORWARD CURRENT DERATING CURVE

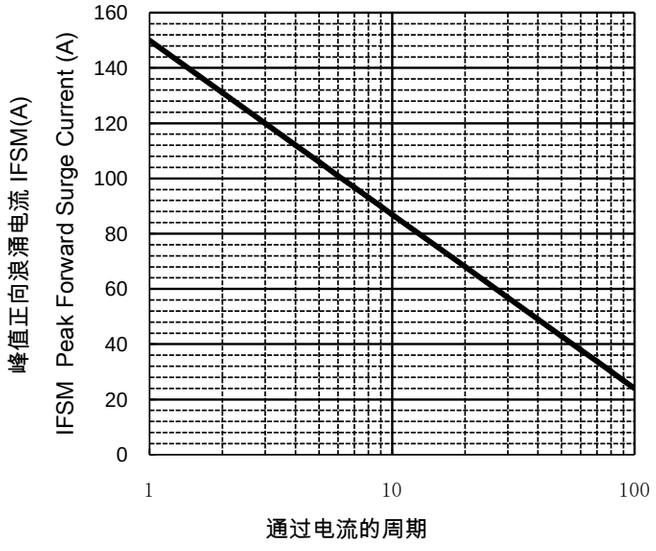


TC Case Temperature (°C)

浪涌特性曲线（最大值）

MAXIMUM NON REPETITIVE

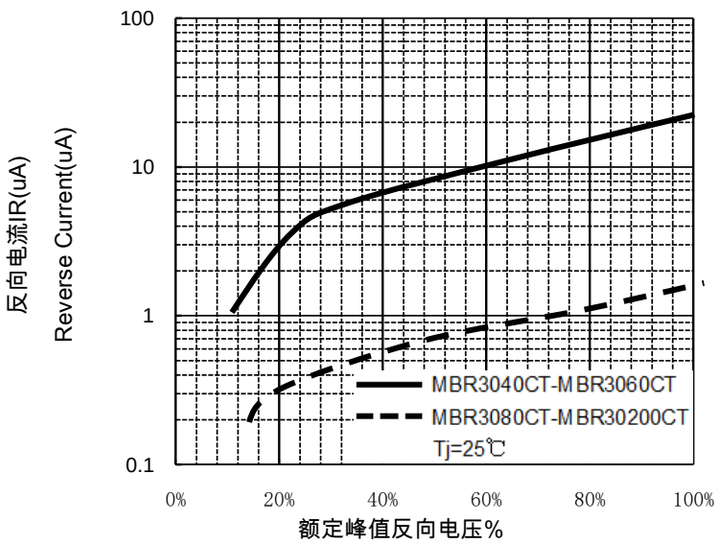
PEAK FORWARD SURGE CURRENT



Number of Cycles at 60 Hz.

反向特性曲线

Typical Reverse Characteristics



Percent Of Rated Peak Reverse voltage %