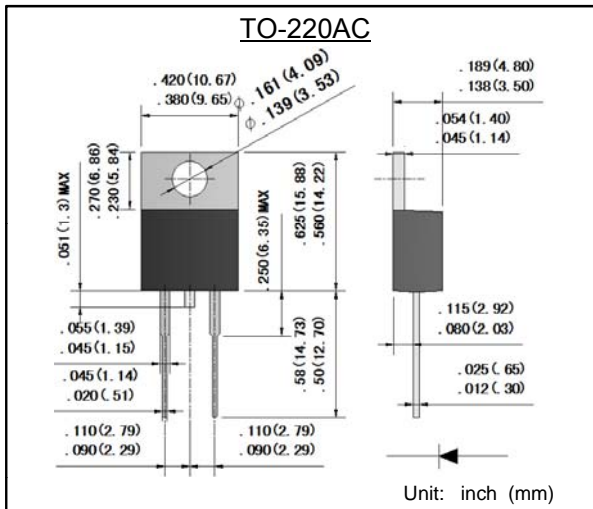




# DFR10A20-DFR10A60

塑封超快速整流二极管  
反向电压 200 ~ 600 V  
正向电流 10 A

Plastic Ultra-Fast Recovery Rectifiers  
Reverse Voltage 200 ~ 600 V  
Forward Current 10 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 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-220AC 塑封 Case: TO-220AC 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

最大值和特性 TA = 25°C 除非另有规定。

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	DFR 10A20	DFR 10A30	DFR 10A40	DFR 10A60	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	$V_{RRM}$	200	300	400	600	V
最大均方根电压 Maximum RMS voltage	$V_{RMS}$	140	210	280	420	V
最大直流阻断电压 Maximum DC blocking voltage	$V_{DC}$	200	300	400	600	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	10.0				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	$I_{FSM}$	125				A
最大正向电压 @IF=10.0A Maximum forward voltage	$V_F$	0.98	1.30		1.80	V
最大反向电流 @V <sub>DC</sub> TA= 25°C Maximum reverse current	$I_R$	30				μA
最大反向恢复时间 IF=0.5A, IR=1.0A, IRR=0.25A MAX. reverse recovery time	$T_{rr}$	30	40			ns
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JC}$	2.5				°C/W
工作结温和存储温度 Operating junction and storage temperature rang	$T_j, T_{STG}$	-55 --- +150				°C

备注 Note:

1) 安装在PCB板上, 从PN结到管体的热阻。

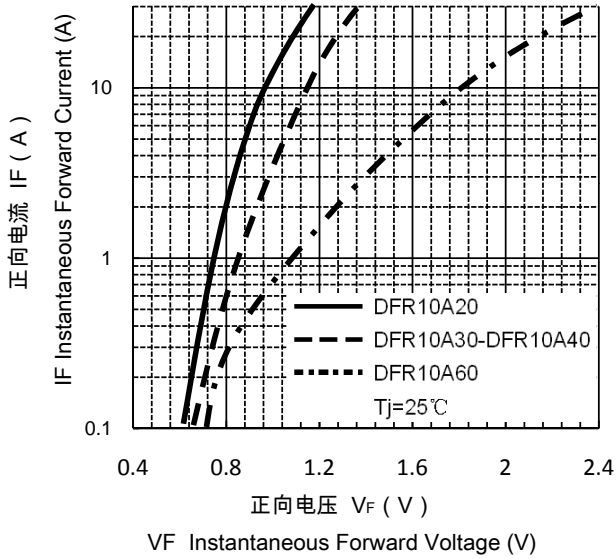
1) Thermal resistance from junction to case, PCB mounted.



## 特性曲线 Characteristic Curves

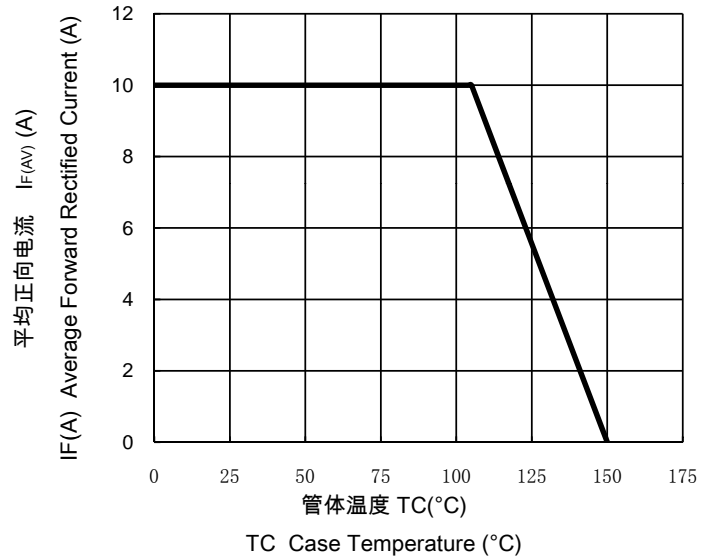
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



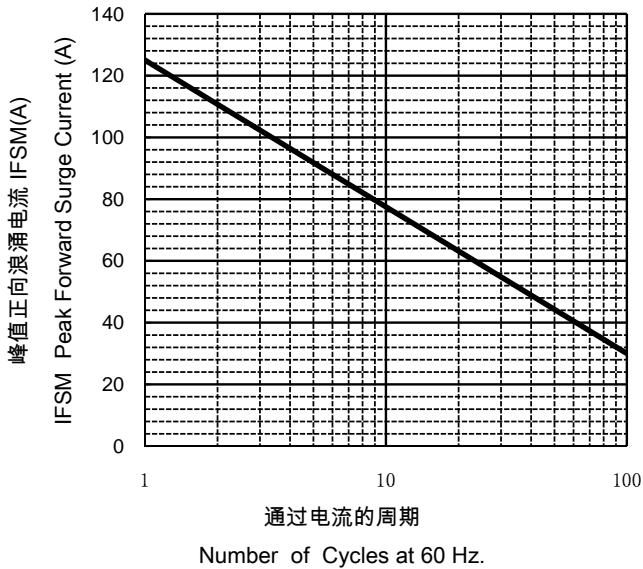
正向电流降额曲线

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

