



肖特基二极管 Schottky Rectifier

■特征 Features

- I_o 20A
- V_{RRM} 35V-150V
- 耐正向浪涌电流能力高
High surge current capability
- 封装: 模压塑料
Cases: Molded plastic

■用途 Applications

- 整流用 Rectifier

■极限值 (绝对最大额定值)

Limiting Values (Absolute Maximum Rating)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Conditions	MBR20-F						
				35	45	50	60	90	100	150
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		35	45	50	60	90	100	150
平均整流输出电流 Average Rectified Output Current	I_o	A	正弦半波 60Hz, 电阻负载, $T_c(\text{Fig.1})$ 60Hz Half-sine wave, Resistance load, $T_c(\text{Fig.1})$	20.0						
正向 (不重复) 浪涌电流 Surge(Non-repetitive)Forward Current	I_{FSM}	A	正弦半波 60Hz, 一个周期, $T_a=25^\circ\text{C}$ 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	150						
结温 Junction Temperature	T_J	$^\circ\text{C}$		-55~+150						
储存温度 Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150						

■电特性 (Ta=25°C 除非另有规定)

Electrical Characteristics (Ta=25°C Unless otherwise specified)

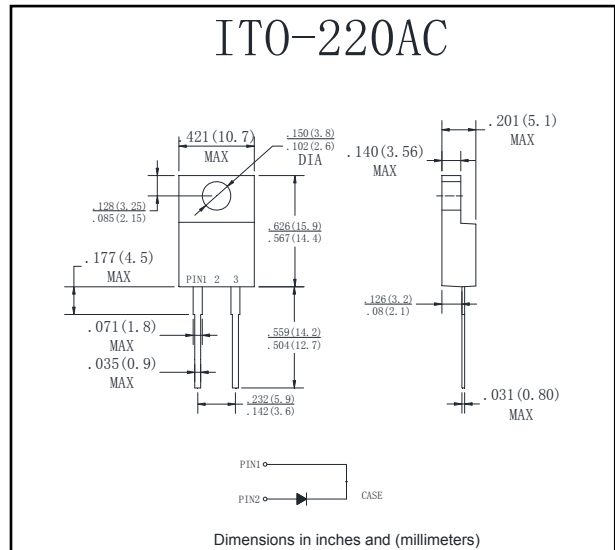
参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	MBR20-F						
				35	45	50	60	90	100	150
正向峰值电压 Peak Forward Voltage	V_F	V	$I_F=20.0\text{A}$	0.75		0.85		0.95		1.02
反向漏电流 Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$						
	I_{RRM2}			$T_a=125^\circ\text{C}$						
热阻 (典型) Thermal Resistance(Typical)	$R_{\theta J-C}$	$^\circ\text{C/W}$	结和壳之间 Between junction and case	3.0 ¹⁾						

备注: Notes:

¹⁾ 热电阻从结到本体,每管脚到散热片的尺寸为 2"×3"×0.25 的铝板

Thermal resistance from junction to case per leg with heat-sink size of 2"×3"×0.25" AL-plate

■外形尺寸和印记 Outline Dimensions and Mark



■ 特性曲线 (典型) Characteristics(Typical)

图1: 正向电流降额曲线
FIG.1: FORWARD CURRENT DERATING CURVE

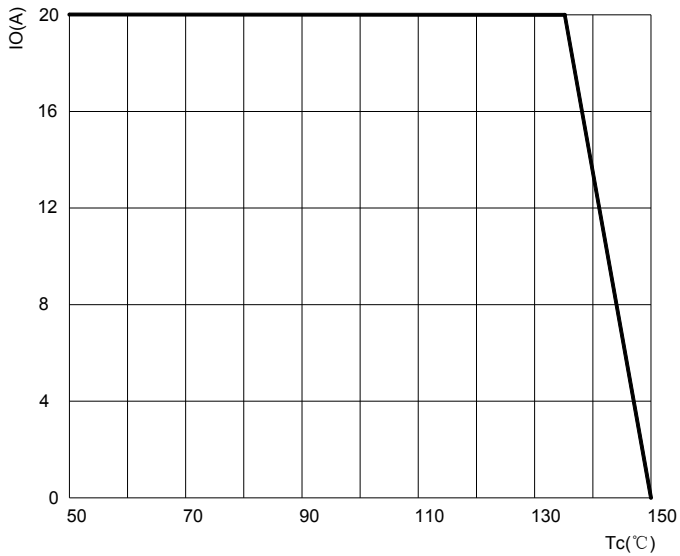


图2: 最大正向浪涌冲击耐受力
FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

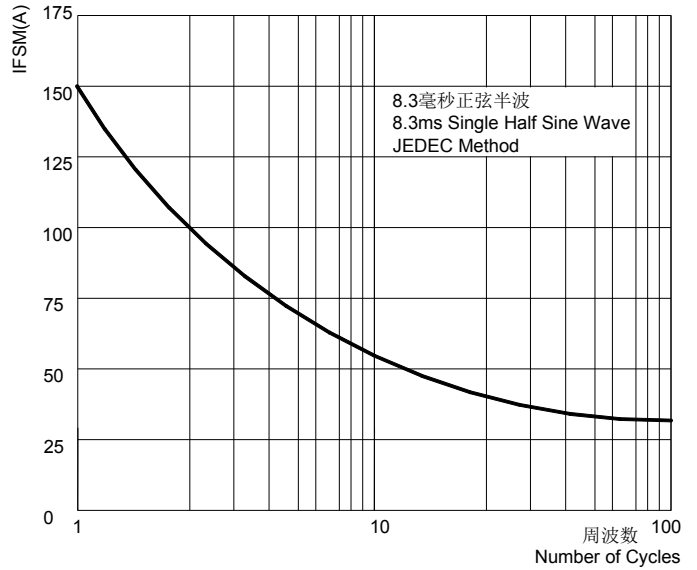


图3: 典型正向特性曲线
FIG.3: TYPICAL FORWARD CHARACTERISTICS

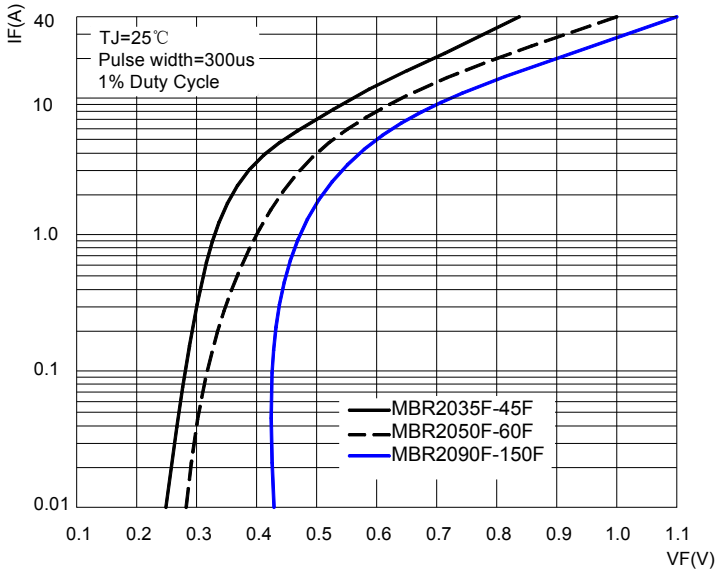


图4: 典型反向特性曲线
FIG.4: TYPICAL REVERSE CHARACTERISTICS

