MBR3035CT~MBR30200CT

RoHS COMPLIANT

肖特基二极管SCHOTTKY Diodes

■特征 Features

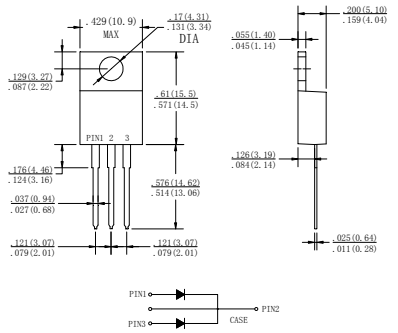
- 耐正向浪涌电流能力高
  High surge forward current capability
- 低功耗，大电流
  Low Power loss, High efficiency
- I_o 30.0A
- V_{RRM} 35-200V

■用途 Applications

- 快速整流用
  High speed switching

■外形尺寸和印记 Outline Dimensions and Mark

TO-220AB



Dimensions in inches and (millimeters)

■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	MBR30-CT									
				35	40	45	50	60	80	90	100	150	200
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		35	40	45	50	60	80	90	100	150	200
平均整流输出电流 Average Rectified Output Current	I_o	A	60Hz 正弦波，电阻负载，T_a=25℃ 60Hz sine wave, R- load, T_a=25℃	30									
正向（不重复）浪涌电流 Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz正弦波，一个周期，T_a=25℃ 60Hz sine wave, 1 cycle, T_a=25℃	200									
正向浪涌电流的平方对电流浪涌持续时间的积分值 Current Squared Time	I^2t	A^2s	1ms≤t＜8.3ms T_j=25℃,单个二极管 1ms≤t＜8.3ms T_j=25℃,Rating of per diode	167									
贮存温度 Storage Temperature	T_{stg}	℃		-55 ~ +150									
结温 Junction Temperature	T_j	℃	在正向直流条件下，没有施加反向压降，通电≤1h（图示1）① IN DC Forward Mode-Forward Operations，without reverse bias, t ≤1 h (Fig. 1)①	-55 ~ +150									

■电特性 （T_a=25℃ 除非另有规定）
Electrical Characteristics（T_a=25℃ Unless otherwise specified）

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition		MBR30-CT									
					35	40	45	50	60	80	90	100	150	200
正向峰值电压 Peak Forward Voltage	V_{FM}	V	I FM =15A		0.7			0.8		0.85			0.90	0.95
反向峰值电流 Peak Reverse Current	I_{RRM1}	mA	V_{RM} =V_{RRM}	T_a=25℃	0.2									
	I_{RRM2}			T_a=100℃	20			15		10				
热阻 Thermal Resistance	$R_{\theta J-C}$	℃/W	结和壳之间 Between junction and case		2.0									

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

■ 特性曲线（典型） **Characteristics(Typical)**

图1：正向电流降额曲线

FIG1: IF（AV）--Tc Derating

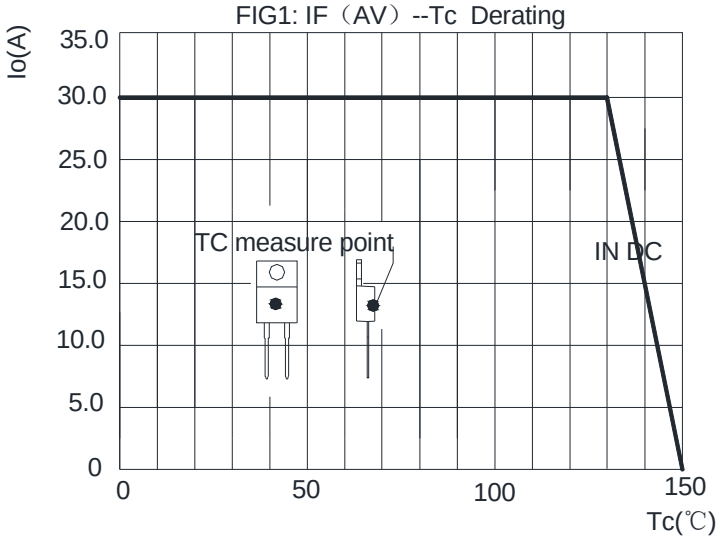


图2：耐正向浪涌电流曲线

FIG2:Surge Forward Current Capadility

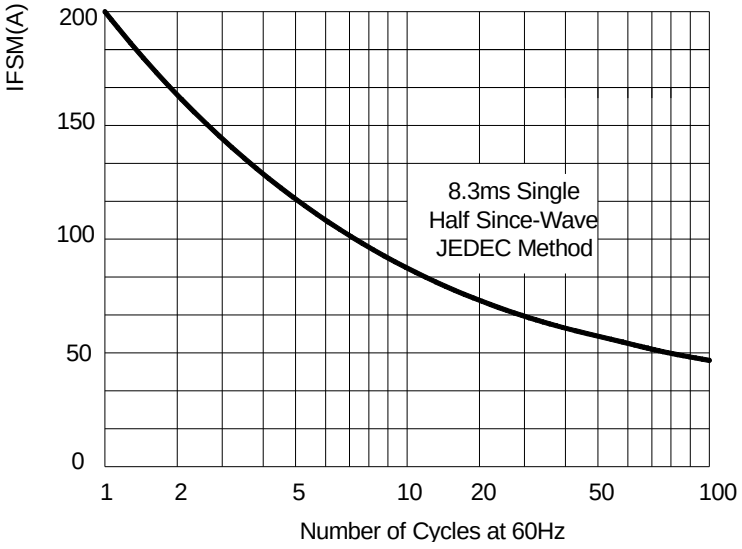


图3：正向电压曲线

FIG3:Instantaneous Forward Voltage

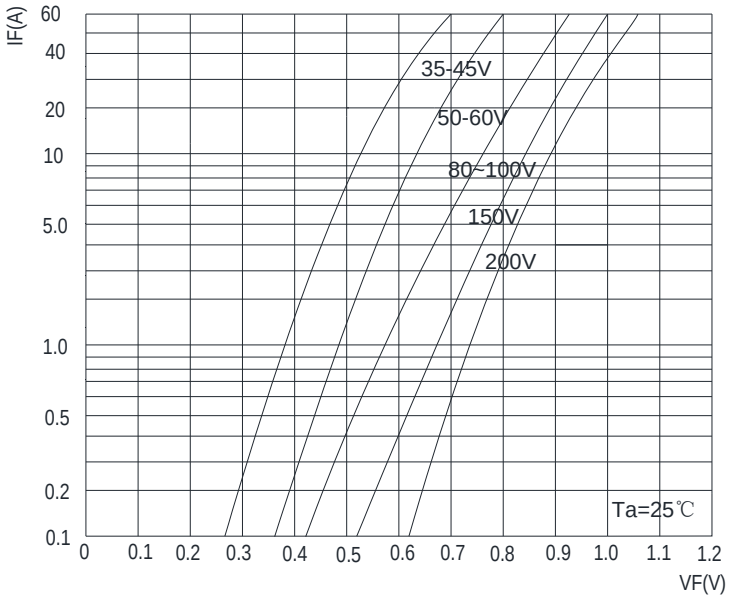


图4：反向电流曲线

FIG4:Typical Reverse Characteristics