

肖特基二极管/Power Schottky Rectifier

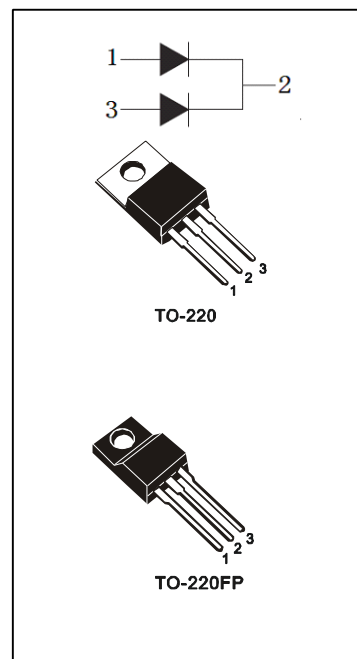
MBR3045CT

- 特点: 高抗浪涌性能 高效 低正向电压 大电流 低功耗 符合 RoHS 规范
- FEATURES: ■HIGH SURGE CAPABILITY ■HIGH EFFICIENCY ■LOW FORWARD VOLTAGE
■HIGH CURRENT CAPABILITY ■LOW POWER LOSS ■RoHS COMPLIANT
- 应用: 低压高频逆变电路 续流电流 保护电流
- APPLICATION: ■LOW VOLTAGE,HIGH FREQUENCY INVERTERS ■FREE WHEELING
■POLARITY PROTECTION APPLICATIONS

●最大额定值 (Tc=25°C)

●Absolute Maximum Ratings (Tc=25°C) TO-220/TO-220FP

参数 PARAMETER	符号 SYMBOL	额定值 VALUE	单位 UNIT
反向重复峰值电压 Repetitive Peak Reverse Voltage	V _{RRM}	45	V
最大直流阻断电压 Maximum DC Reverse Voltage	V _R	45	V
平均整流输出电流 Average Rectified Output Current @Tc=125°C	I _{F(AV)}	30	A
正向峰值浪涌电流 Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	220	A
最高结温 Maximum Operating Junction Temperature	T _j	150	°C
贮存温度 Storage Temperature	T _{stg}	-65-150	°C



●电特性 (Tc=25°C)

●Electronic Characteristics (Tc=25°C)

参数名称 CHARACTERISTICS	符号 SYMBOL	测试条件 TEST CONDITION	最小值 MIN	典型值 TYP	最大值 MAX	单位 UNIT
正向压降 Forward Voltage Drop	V _{FM}	@I _F =15A, Tc=25°C			0.62	V
		@I _F =15A, Tc=125°C			0.56	
		@I _F =30A, Tc=25°C			0.78	
		@I _F =30A, Tc=125°C			0.64	
反向电流 Peak Reverse Current @ Rated V _R	I _{RM}	@Tc=25°			0.1	mA
		@Tc=125°C			30	

●热特性

●Thermal Characteristics

项目 PARAMETER	符号 SYMBOL	最大值 VALUE	单位 UNIT
热阻结-壳 Thermal Resistance Junction-case	R _{thJc}	TO-220: 1.3	°C/W
		TO-220FP: 3.5	

●订单信息/ORDERING INFORMATION:

包装形式/PACKING	订货编码/ORDERING CODE	
	普通塑封料/ Normal Package Material	无卤塑封料/Halogen Free
TO-220 条管装/TUBE PACKING	MBR3045CT TO-220-TU	MBR3045CT TO-220-TU-HF
TO-220FP 条管装/TUBE PACKING	MBR3045CT TO-220FP-TU	MBR3045CT TO-220FP-TU-HF

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MBR3045CT

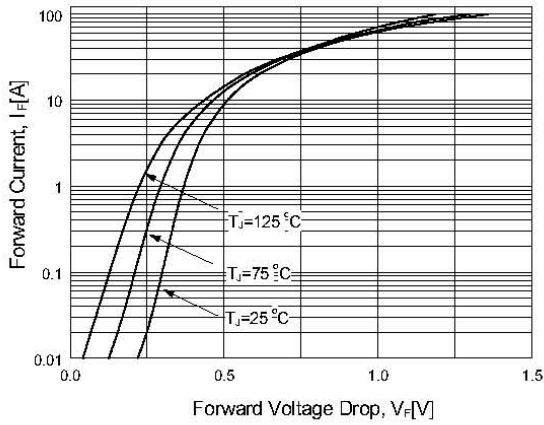


Figure 1. Typical Forward Voltage Characteristics (per diode)

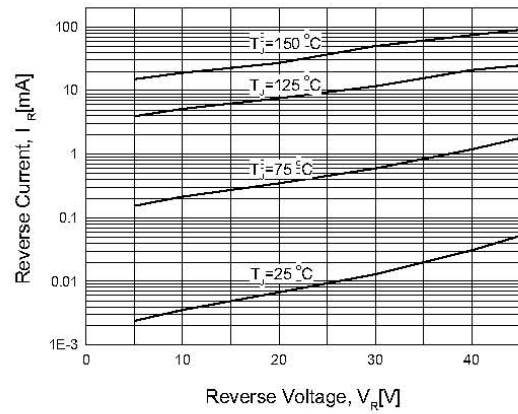


Figure 2. Typical Reverse Current vs. Reverse Voltage (per diode)

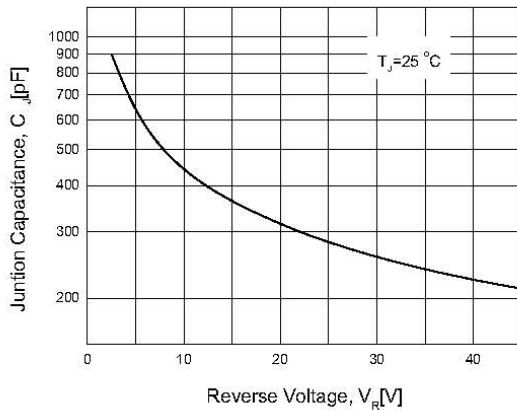


Figure 3. Typical Junction Capacitance (per diode)

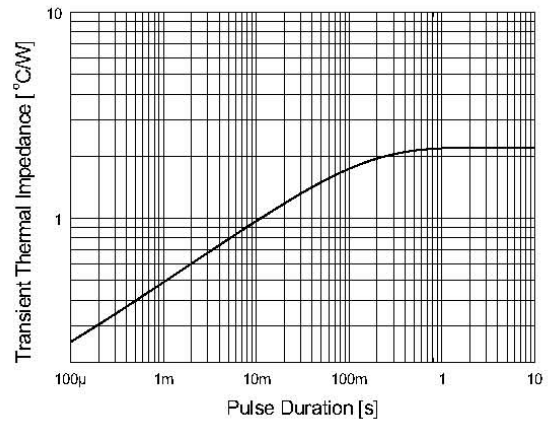


Figure 4. Thermal Impedance Characteristics (per diode)

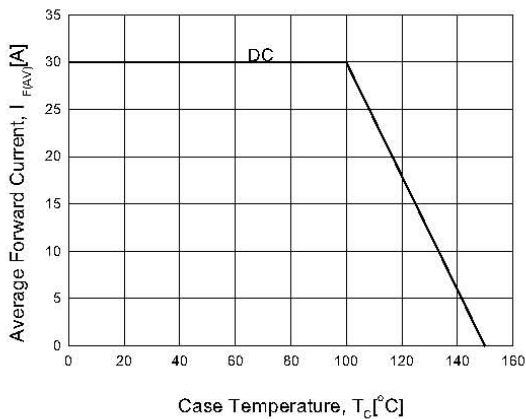


Figure 5. Forward Current Derating Curve

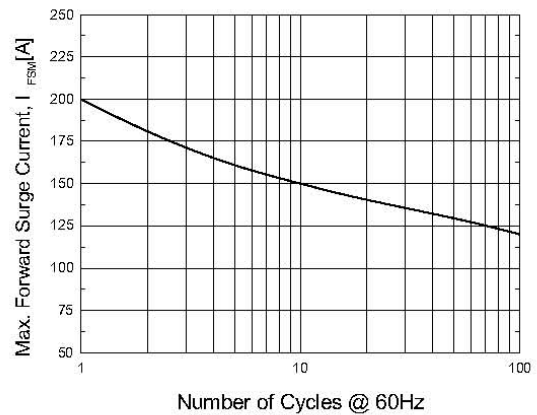
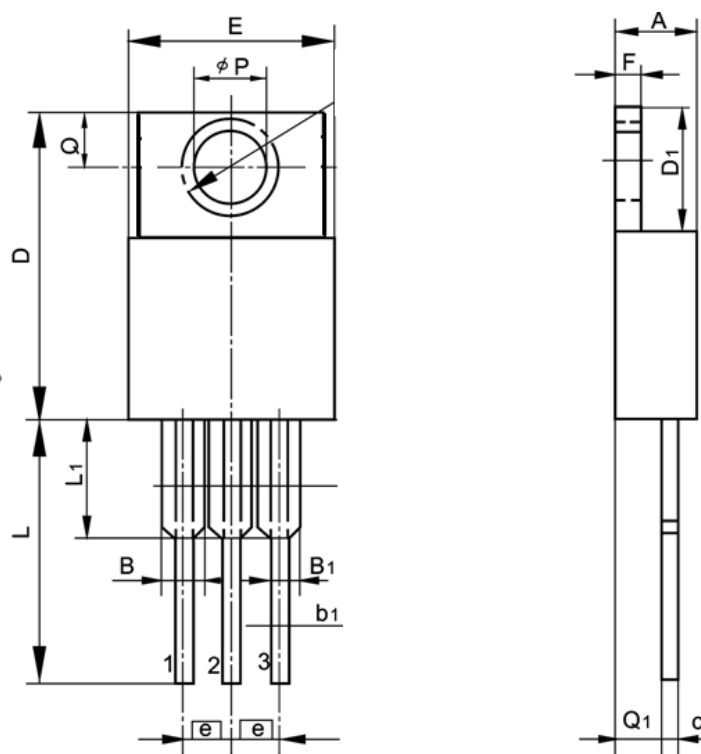


Figure 6. Non-Repetitive Surge Current (per diode)

TO-220 封装机械尺寸 TO-220 MECHANICAL DATA

单位：毫米/UNIT: mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	4.00		4.80	E	9.90		10.70
B	1.20		1.50	e		2.54	
B1	1.00		1.40	F	1.10		1.45
b1	0.65		1.00	L	12.50		14.50
c	0.35		0.75	L1	3.00	3.50	4.00
D	15.00		16.50	Q	2.50		3.00
D1	5.90		6.90	Q1	2.00		3.00
				φP	3.60		3.90



TO-220FP 封装机械尺寸 TO-220FP MECHANICAL DATA

单位:毫米/UNIT: mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	4.40		4.95	e		2.54	
A ₁	2.30		2.90	L	12.50		14.30
b	0.45		0.90	L ₁	9.10		10.05
b ₁	1.10		1.70	L ₂	15.00		16.00
c	0.35		0.90	L ₃	3.00		4.00
D	14.50		17.00	øp	3.00		3.50
D ₁	6.10		9.00	Q	2.30		2.80
E	9.60		10.30				

