MBR1530 thru MBR15100

塑封肖特基整流二极管

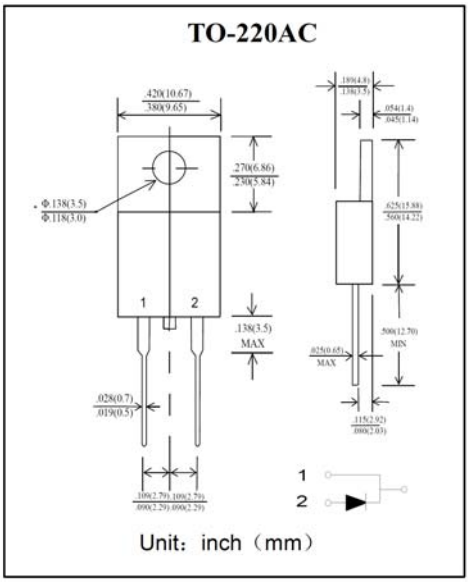
反向电压30 --- 100 V

正向电流15.0A

Plastic Schottky Barrier **Rectifiers**

Reverse Voltage 30 to 100 V

Forward Current 15.0 A



特征 Features

- 塑料包装符合UL易燃性等级94V-O Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- 低的反向漏电流 Low reverse leakage
- 较强的正向浪涌承受能力 High forward surge capability
- 高温焊接保证 High temperature soldering guaranteed: 260℃/10秒 260℃/10 seconds at terminals
- 引线和管体皆符合 RoHS 标准。Lead and body according with RoHS standard

机械数据 Mechanical Data

- 封装: 塑料封装 Case: Molded plastic body
- 端子: 焊料被镀 Terminals: Solder plated
- 极性: 标记印于本体 Polarity: Symbols marked on body
- 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

极限值和温度特性 T_A = 25℃ 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

	Symbols	MBR 1530	MBR 1535	MBR 1540	MBR 1545	MBR 1560	MBR 1580	MBR 15100	Unit
最大反向峰值电压 Maximum repetitive peak reverse voltage	V_{RRM}	30	35	40	45	60	80	100	V
最大反向有效值电压 Maximum RMS voltage	V_{RMS}	21	24	27	31	42	56	70	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	30	35	40	45	60	80	100	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	15.0							A
正向峰值浪涌电流 8.3ms单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	150							A
典型热阻 Typical thermal resistance	$R_{\theta JC}$	3.5				2.0			℃/W
工作结温和存储温度 Operating junction and storage temperature range	T_J, T_{STG}	-65---+150							℃

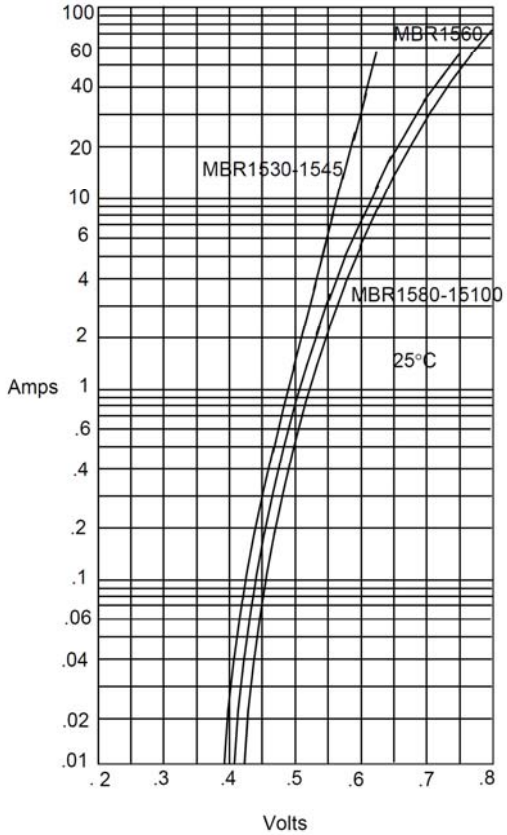
电特性 TA = 25℃除非另有规定。

Electrical Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

		Symbols	MBR 1530	MBR 1535	MBR 1540	MBR 1545	MBR 1560	MBR 1580	MBR 15100	Unit
最大正向电压 I_F = 15.0A Maximum forward voltage	T_A= 25℃ T_A= 125℃	V_F	0.63 0.57				0.75 0.65	0.85 0.75		V
最大反向漏电流 Maximum reverse current	T_A= 25℃ T_A= 125℃	I_R	0.2 20.0				0.1 10.0			mA

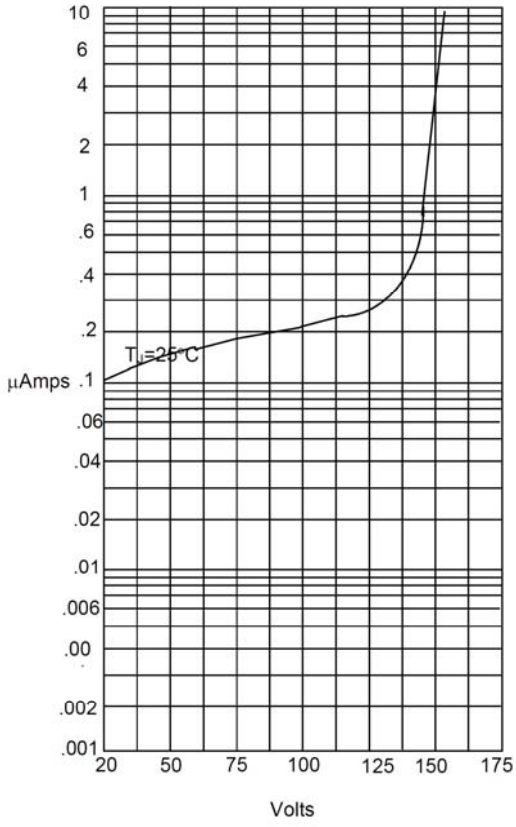
特性曲线 Characteristic Curves

Figure 1
Typical Forward Characteristics



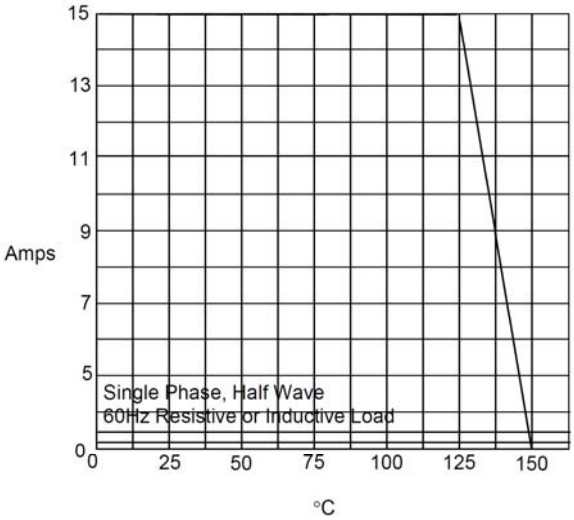
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



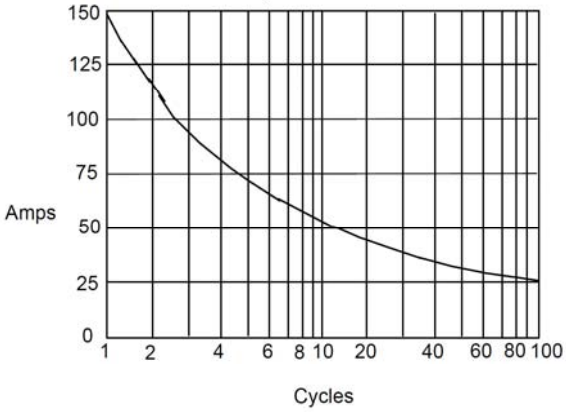
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature -°C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles