



MBR560

主要参数 MAIN CHARACTERISTICS

$I_{F(AV)}$	5A
V_{RRM}	60 V
T_j	150 °C
$V_{F(max)}$	0.58V (@ $T_j=125^{\circ}C$)

用途

- 低压、高频整流
- 低压续流电路和保护电路

APPLICATIONS

- Low voltage, high frequency rectifier
- Free wheeling diodes, polarity protection applications

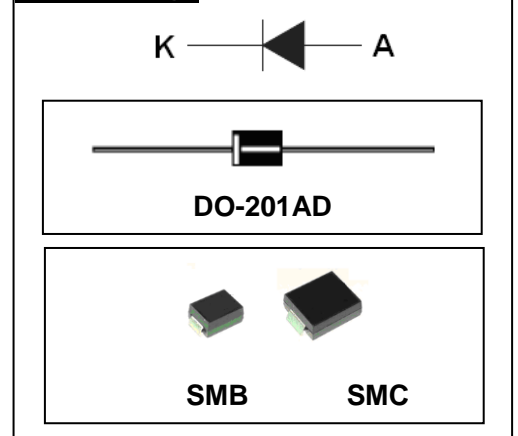
产品特性

- 轴向结构
- 低功耗，高效率
- 良好的高温特性
- 有过压保护环，高可靠性
- 环保（RoHS）产品

FEATURES

- Axial Lead Rectifier
- Low power loss, high efficiency
- High Operating Junction Temperature
- Guard ring for overvoltage protection, High reliability
- RoHS product

封装 Package



订货信息 ORDER MESSAGE

订货型号 Order codes				印记 Marking	封装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube	有卤-编带 Halogen-Reel	无卤-编带 Halogen Free-Reel		
N/A	N/A	MBR560-D-A	MBR560-D-AR	MBR560	DO-201AD
N/A	N/A	MBR560-XC-A	MBR560-XC-AR	MBR560	SMB
N/A	N/A	MBR560-XE-A	MBR560-XE-AR	MBR560	SMC

绝对最大额定值 ABSOLUTE RATINGS ($T_c=25^{\circ}C$)



项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
最大反向重复峰值电压 Repetitive peak reverse voltage	V_{RRM}	60	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	60	V
正向平均整流电流 $T_C=100^{\circ}C$ Average Rectified Forward Current	$I_{F(AV)}$	5	A
正向峰值浪涌电流 Surge non repetitive forward current (额定负载 8.3ms 半正弦波—按 JEDEC 方法) 8.3 ms single half-sine-wave (JEDEC Method)	I_{FSM}	120	A
最高结温 Maximum junction temperature	T_j	150	$^{\circ}C$
储存温度 Storage temperature range	T_{STG}	-40~+150	$^{\circ}C$

电特性 ELECTRICAL CHARACTERISTICS

项 目 Parameter	测试条件 Tests conditions		最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
I_R	$T_j = 25^{\circ}C$	$V_R = V_{RRM}$			50	μA
	$T_j = 125^{\circ}C$				30	mA
V_F	$T_j = 25^{\circ}C$	$I_F = 5A$		0.60	0.7	V
	$T_j = 125^{\circ}C$			0.55	0.58	V

热特性 THERMAL CHARACTERISTICS

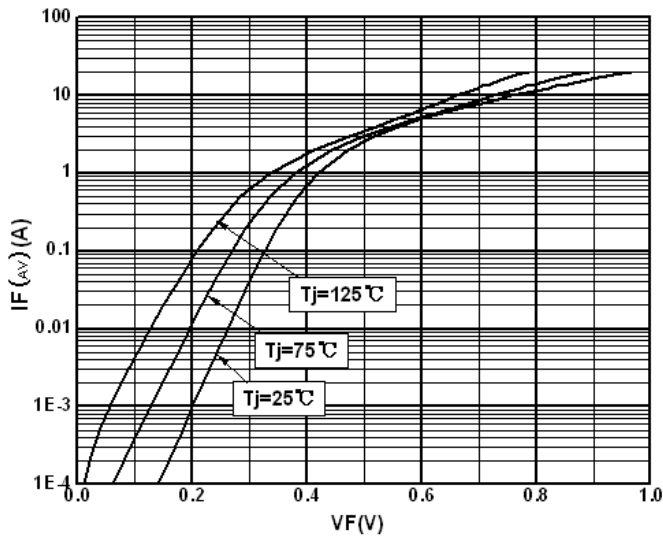
项 目 Parameter		符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到环境的热阻 Thermal resistance from junction to ambient	DO-201AD	$R_{th(j-a)}$		70	$^{\circ}C/W$
	SMB			140	
	SMC			120	
结到管壳的热阻 Thermal resistance from junction to case	DO-201AD	$R_{th(j-c)}$		25	$^{\circ}C/W$
	SMB			40	
	SMC			37	

特征曲线 ELECTRICAL CHARACTERISTICS (curves)

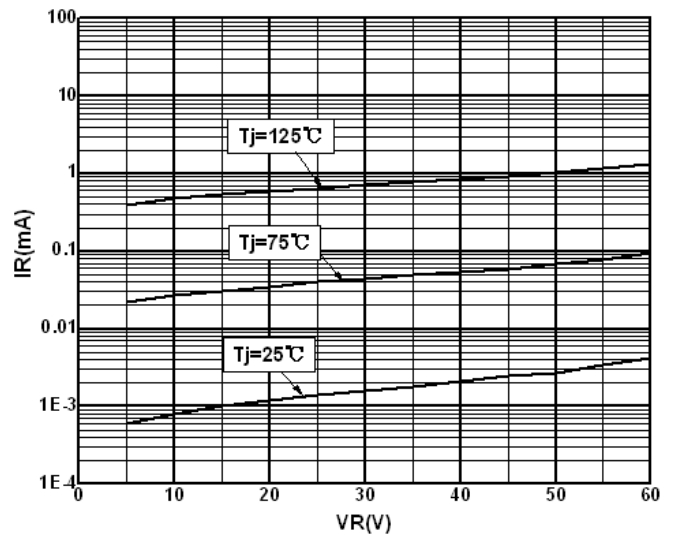


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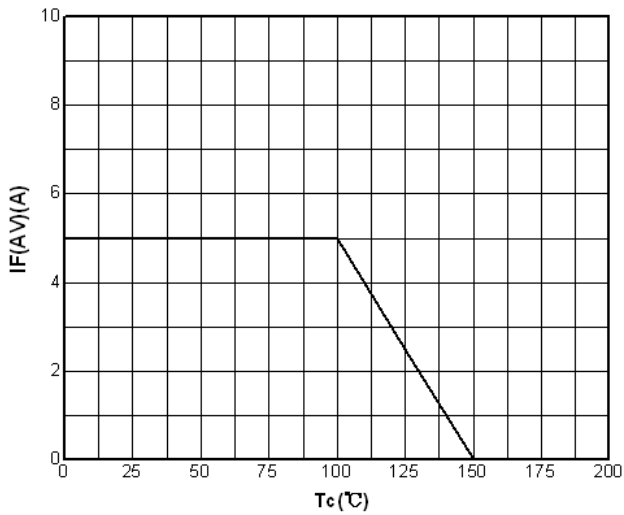
IF vs VF



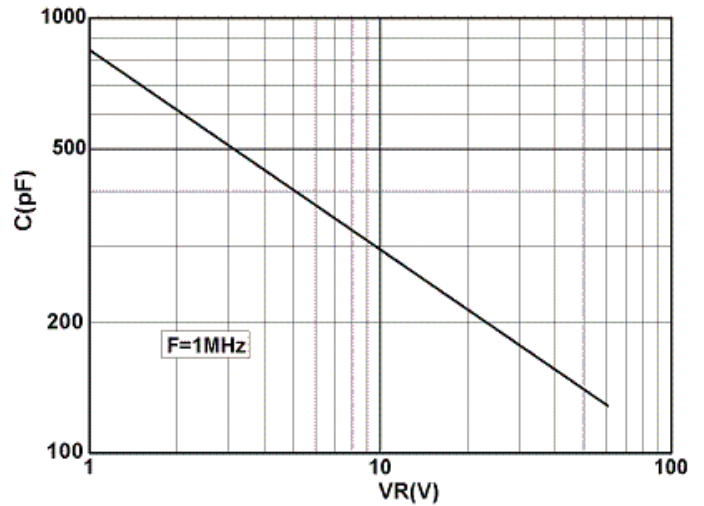
IR vs VR



IF(AV) vs Tc



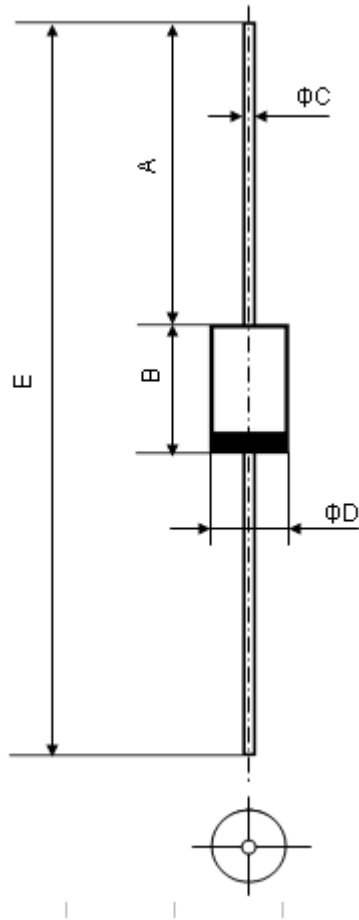
CJ vs VR



外形尺寸 PACKAGE MECHANICAL DATA

DO-201AD

单位 Unit : mm

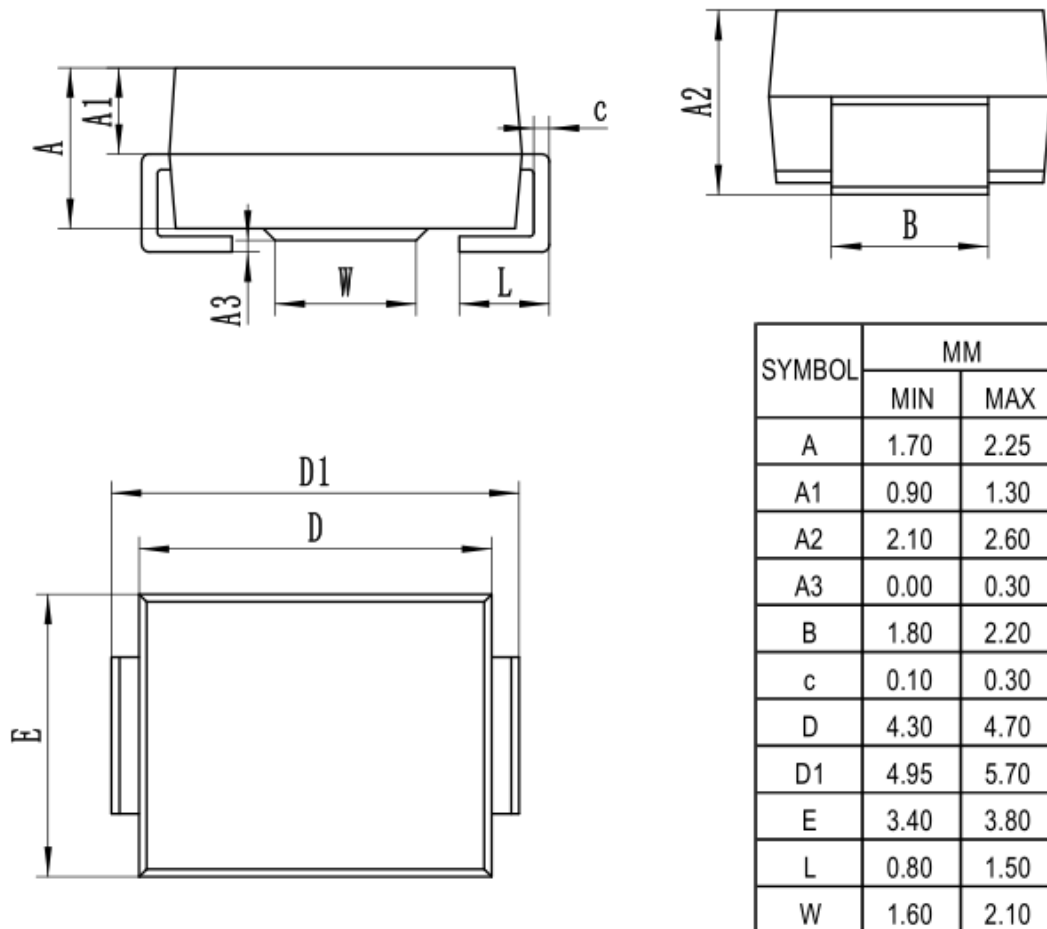


符号 Symbol	Min	Max
A	25.4	--
B	8.5	9.5
C	1.2	1.3
D	5.0	5.6
E	59.5	64

外形尺寸 PACKAGE MECHANICAL DATA

SMB

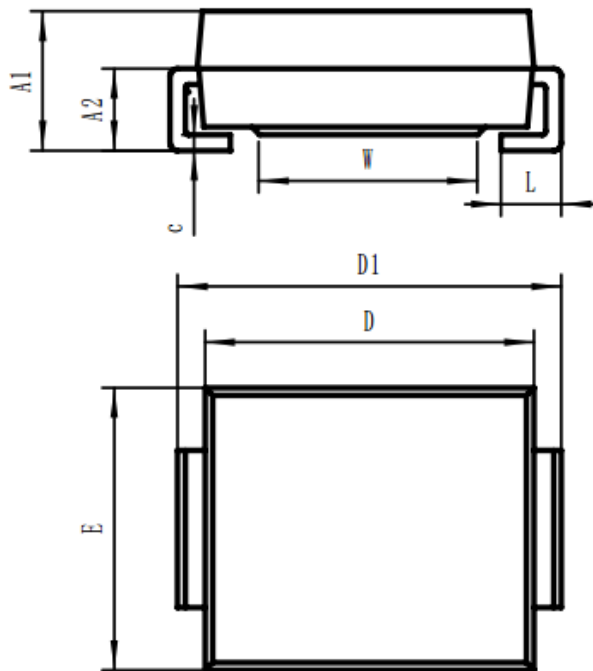
单位 Unit : mm



外形尺寸 PACKAGE MECHANICAL DATA

SMC

单位 Unit : mm



SYMBOL	MIN	MAX
A	2.30	2.70
A1	2.40	3.00
A2	1.30	1.90
A3	0.10	0.20
B	2.80	3.10
c	0.15	0.25
D	6.70	7.10
D1	7.70	8.30
E	5.80	6.20
L	0.90	1.60
W	4.30	4.70

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