



HBR2150

主要参数 MAIN CHARACTERISTICS

$I_{F(AV)}$	2A
V_{RRM}	150 V
T_j	175 °C
$V_{F(max)}$	0.76V (@ $T_j=125^{\circ}C$)

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

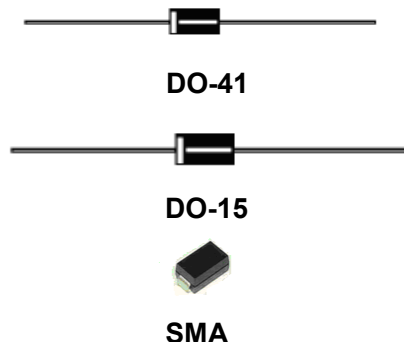
产品特性

- 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	无卤素 Halogen Free	包装 Packaging	器件重量 Device Weight
HBR2150Y	HBR2150	DO-41	否 NO	编带 Tape	0.28g(approx.)
HBR2150YR	HBR2150	DO-41	是 YES	编带 Tape	0.28g(approx.)
HBR2150Q	HBR2150	DO-15	否 NO	编带 Tape	0.33g(approx.)
HBR2150QR	HBR2150	DO-15	是 YES	编带 Tape	0.33g(approx.)
HBR2150X	HBR2150	SMA	否 NO	编带 Tape	0.071g(approx.)
HBR2150XR	HBR2150	SMA	是 YES	编带 Tape	0.071g(approx.)



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

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}	150	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	150	V
正向平均整流电流 $T_c=125^{\circ}\text{C}$ Average Rectified Forward Current	$I_{F(AV)}$	2	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}	50	A
最高结温 Maximum junction temperature	T_j	175	$^{\circ}\text{C}$
储存温度 Storage temperature range	T_{STG}	-40~+150	$^{\circ}\text{C}$

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	$T_j = 25^{\circ}\text{C}$	$V_R = V_{RRM}$			10	μA
	$T_j = 125^{\circ}\text{C}$				5	mA
V_F	$T_j = 25^{\circ}\text{C}$	$I_F = 2\text{A}$		0.80	0.9	V
	$T_j = 125^{\circ}\text{C}$			0.70	0.76	V

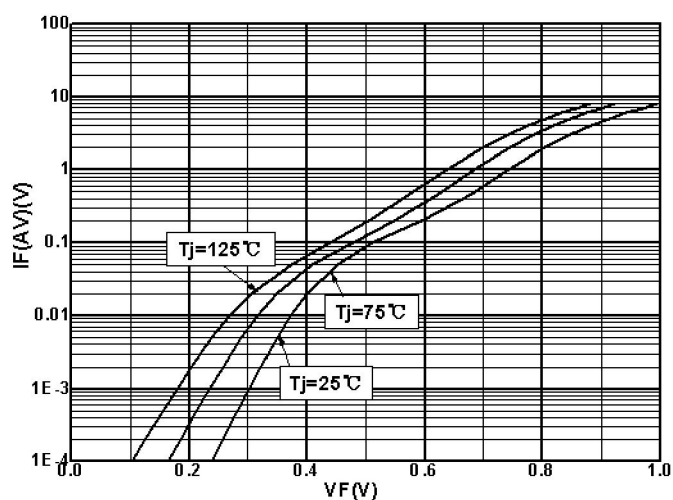
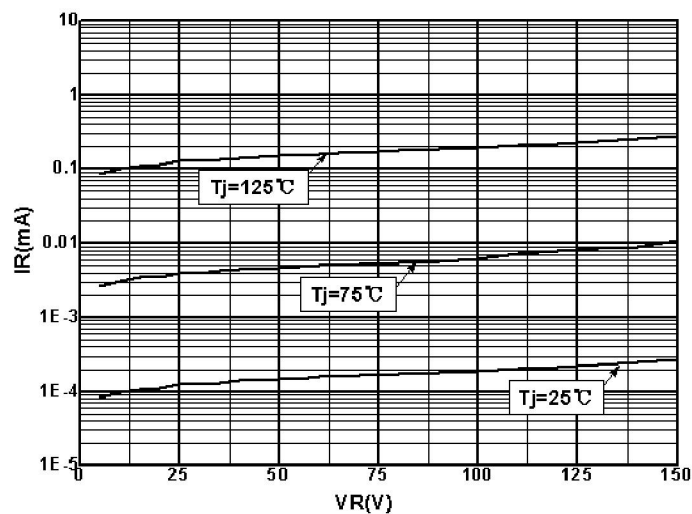
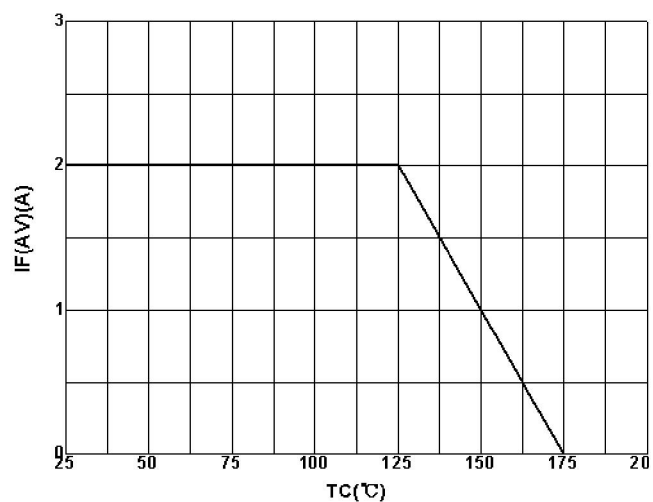
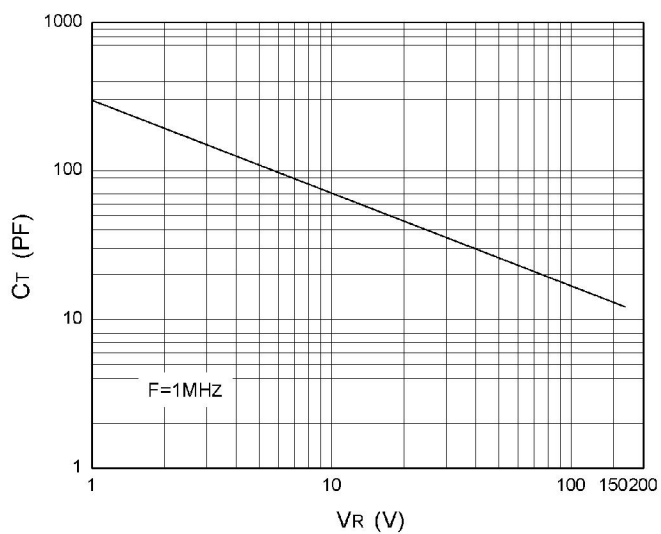
热特性 THERMAL CHARACTERISTICS

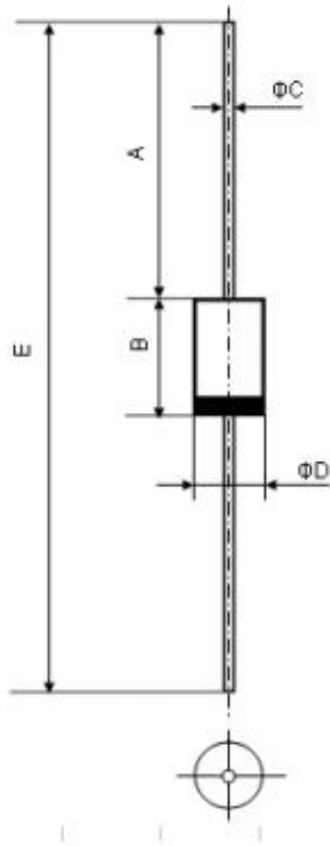
项 目 Parameter		符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到环境的热阻 Thermal resistance from junction to ambient	DO-41 DO-15 SMA	$R_{th(j-a)}$		100 85 150	$^{\circ}\text{C/W}$
结到管壳的热阻 Thermal resistance from junction to case	DO-41 DO-15 SMA	$R_{th(j-c)}$		50 40 50	$^{\circ}\text{C/W}$





特征曲线 ELECTRICAL CHARACTERISTICS (curves)

 I_F vs V_F  I_R vs V_R  $I_F(AV)$ vs T_C  C_J vs V_R 



符号 ¹⁾ symbol ¹⁾	Min ²⁾	Max ²⁾
A ³⁾	25.4 ³⁾	-- ³⁾
B ³⁾	4.2 ³⁾	5.2 ³⁾
C ³⁾	0.7 ³⁾	0.9 ³⁾
D ³⁾	2.0 ³⁾	2.7 ³⁾



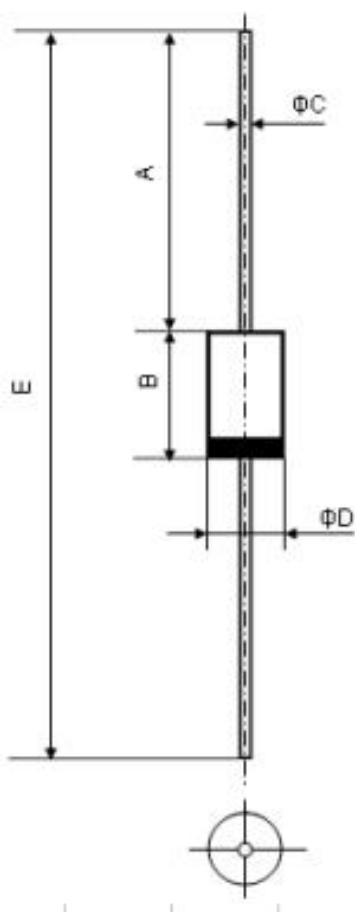


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外形尺寸 PACKAGE MECHANICAL DATA

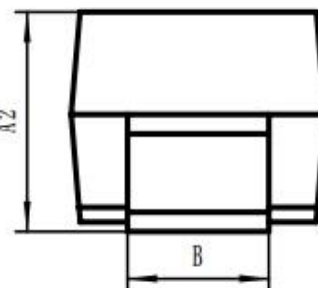
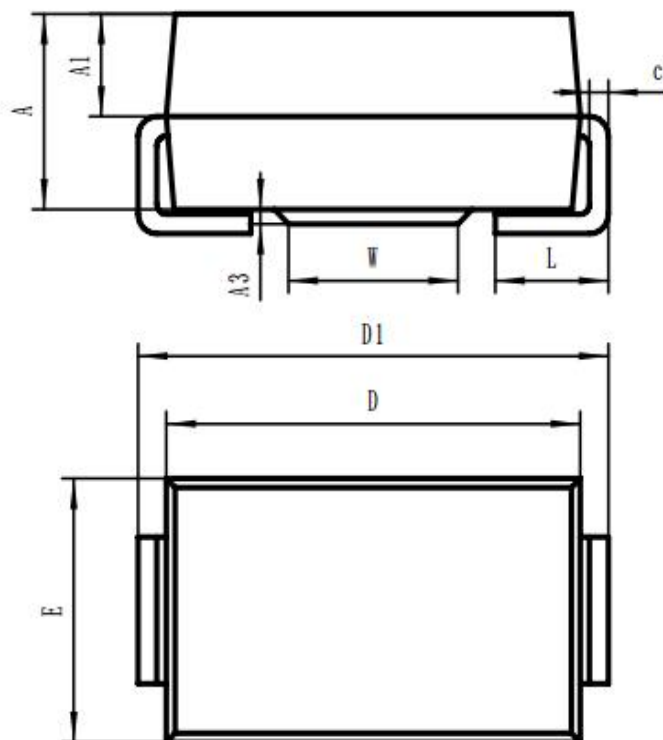
DO-15

单位 Unit : mm



符号 symbol	Min	Max
A	25.4	—
B	5.8	7.6
C	0.7	0.9
D	2.6	3.6





SYMBOL	MIN	MAX
A	1.80	2.20
A1	0.85	1.25
A2	1.90	2.60
A3	0.10	0.20
B	1.30	1.70
c	0.15	0.25
D	4.20	4.65
D1	4.70	5.30
E	2.50	2.90
L	0.85	1.55
W	1.60	2.00



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3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知

NOTE

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3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

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附录 (Appendix): 修订记录 (Revision History)

日期 Date	旧版本 Last Rev.	新版本 New Rev.	修订内容 Description of Changes

