



# 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

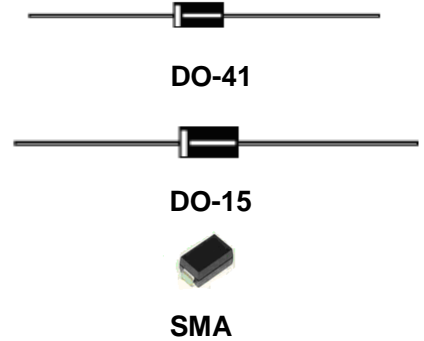
### 产品特性

- 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
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	HBR2150-DC-A	HBR2150-DC-AR	HBR2150	DO-41
N/A	N/A	HBR2150-DB-A	HBR2150-DB-AR	HBR2150	DO-15
N/A	N/A	HBR2150-XA-A	HBR2150-XA-AR	HBR2150	SMA



**绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)**

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 <sub>c</sub> =125℃ 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	℃
储存温度 Storage temperature range	$T_{STG}$	-40~+150	℃

**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**

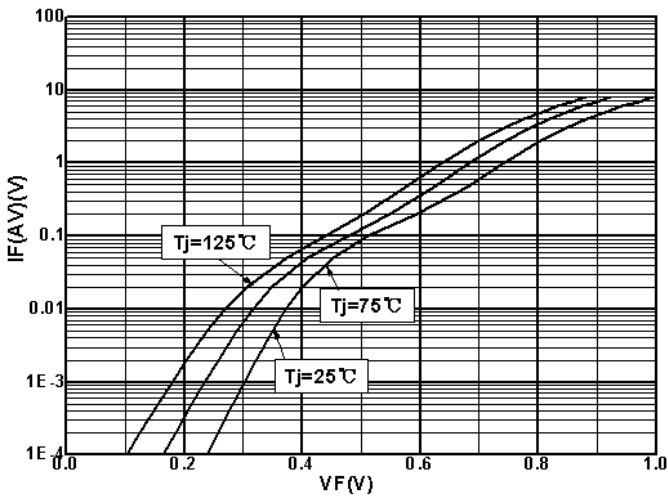
项 目 Parameter		符 号 Symbol	最 小 值 Value(min)	最 大 值 Value(max)	单 位 Unit
结到环境的热阻 Thermal resistance from junction to ambient	DO-41	$R_{th(j-a)}$		100	℃/W
	DO-15			85	
	SMA			150	
结到管壳的热阻 Thermal resistance from junction to case	DO-41	$R_{th(j-c)}$		50	℃/W
	DO-15			40	
	SMA			50	



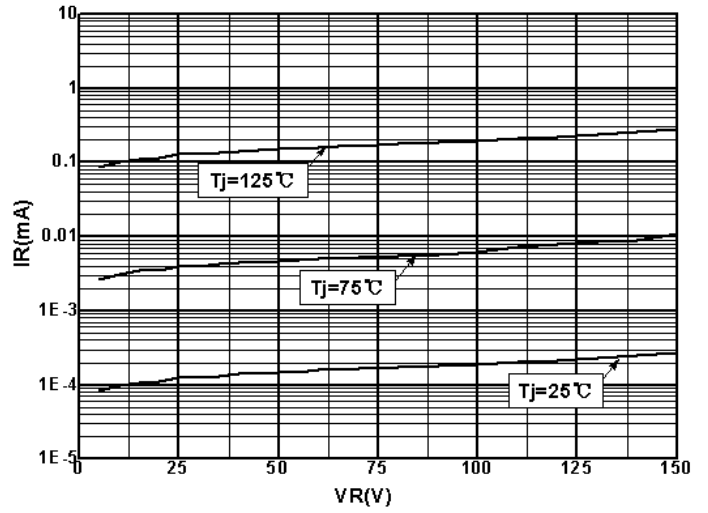


特征曲线 ELECTRICAL CHARACTERISTICS (curves)

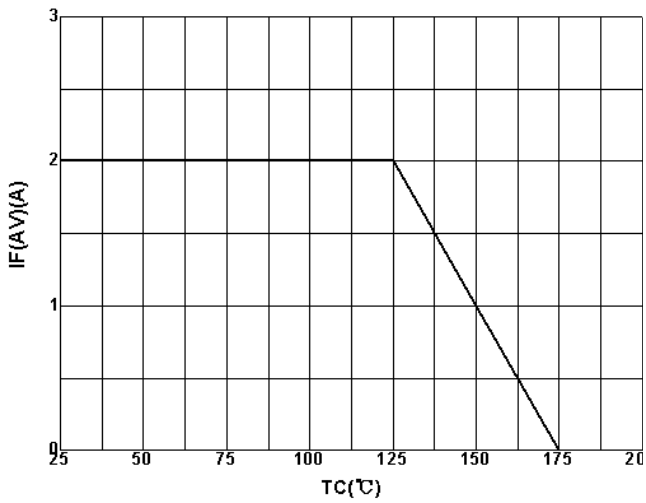
IF vs VF



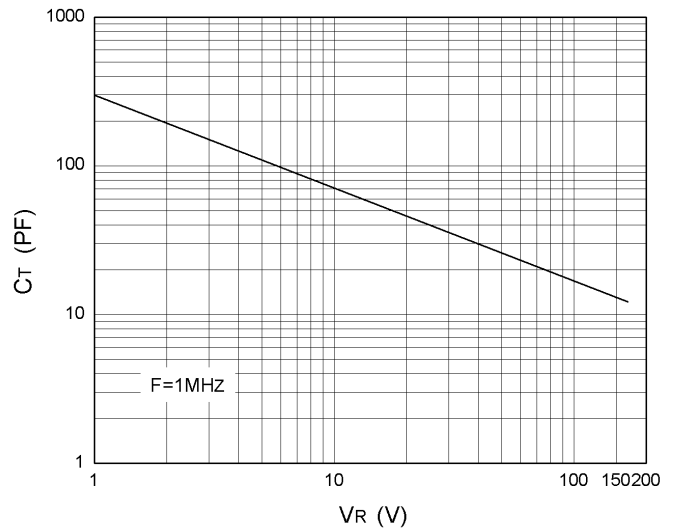
IR vs VR

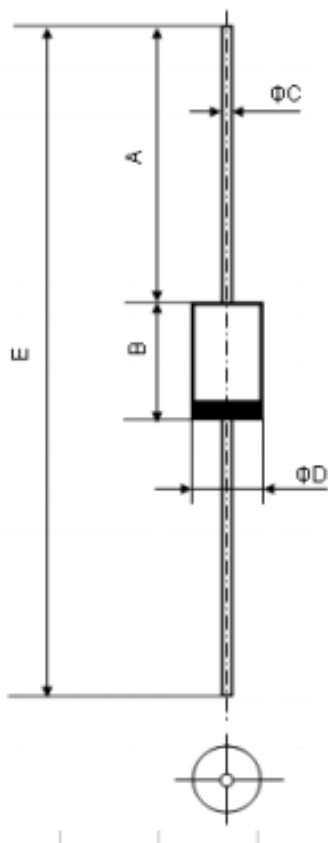


IF(AV) vs TC



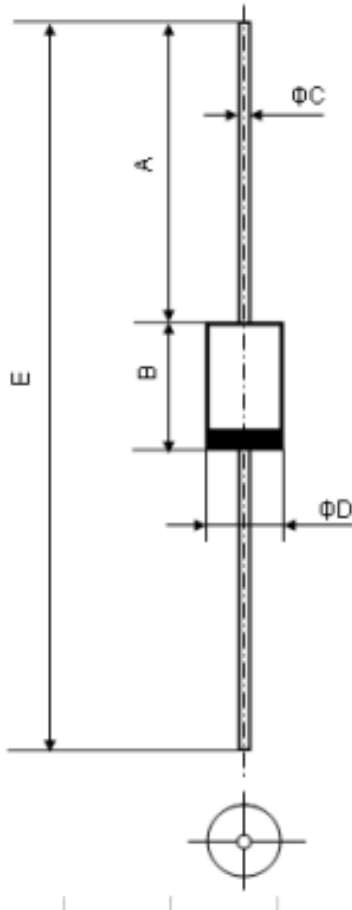
CJ vs VR





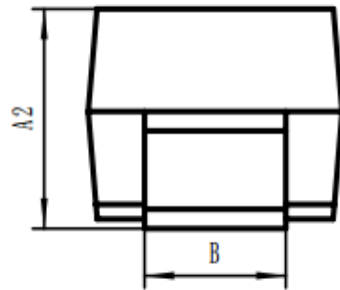
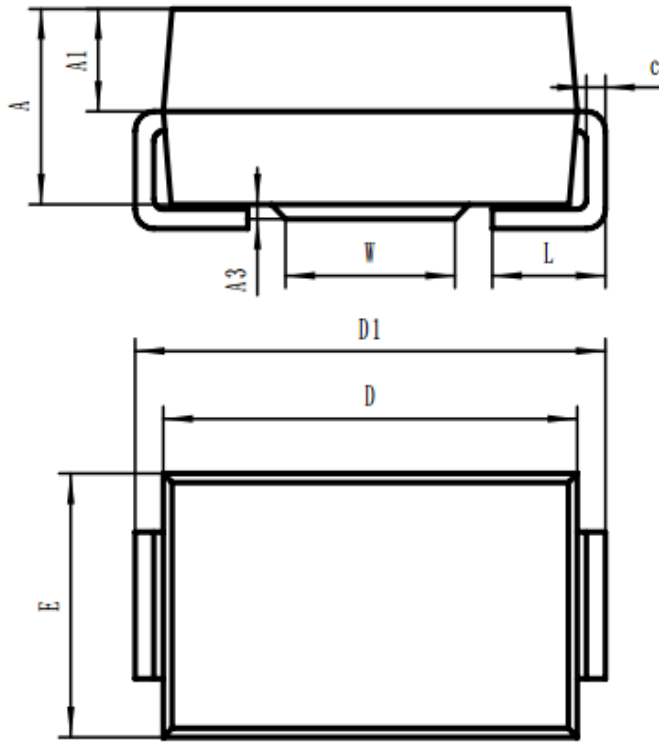
符号 <sup>1)</sup> symbol <sup>1)</sup>	Min <sup>2)</sup>	Max <sup>2)</sup>
A <sup>3)</sup>	25.4 <sup>3)</sup>	-- <sup>3)</sup>
B <sup>3)</sup>	4.2 <sup>3)</sup>	5.2 <sup>3)</sup>
C <sup>3)</sup>	0.7 <sup>3)</sup>	0.9 <sup>3)</sup>
D <sup>3)</sup>	2.0 <sup>3)</sup>	2.7 <sup>3)</sup>





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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