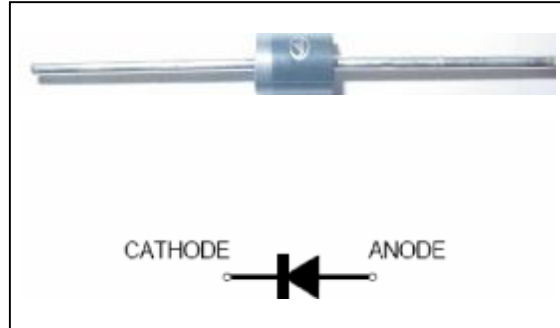


# 1H1 thru 1H8

## Glass Passivated Junction High Efficiency Rectifiers Reverse Voltage 50 to 1000V Forward Current 1.0A

### Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 1.0 A operation at TA=55°C with no thermal runaway
- \* For use in high frequency rectifier circuits
- \* Fast switching for high efficiency
- \* Typical IR less than 1.0μA
- \* High temperature soldering guaranteed: 350°C/10 seconds
- \* 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



We declare that the material of product compliance with ROHS requirements

### Mechanical Data

- Case:** JEDEC R-1, molded plastic body;  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.007 oz., 0.20 g  
**Handling precaution:** None

### 1. Electrical Characteristic

#### Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol  | symbol          | 1H1G       | 1H2G | 1H3G | 1H4G | 1H5G | 1H6G | 1H7G | 1H8G | Unit |
|---|-----------------|------------|------|------|------|------|------|------|------|------|
| device marking code   |                 | 1H1G       | 1H2G | 1H3G | 1H4G | 1H5G | 1H6G | 1H7G | 1H8G |      |
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 50         | 100  | 200  | 300  | 400  | 600  | 800  | 1000 | V    |
| Maximum RSM voltage   | $V_{RSM}$       | 35         | 70   | 140  | 210  | 280  | 420  | 560  | 700  | V    |
| Maximum DC blocking voltage   | $V_{DC}$        | 50         | 100  | 200  | 300  | 400  | 600  | 800  | 1000 | V    |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 55^\circ\text{C}$              | $I_F(AV)$       | 1.0        |      |      |      |      |      |      |      | A    |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)              | $I_{FSM}$       | 30         |      |      |      |      |      |      |      | A    |
| Maximum full load reverse current, full cycle average, 0.375"(9.5mm) lead lengths at $T_A = 55^\circ\text{C}$ | $I_R(AV)$       | 100        |      |      |      |      |      |      |      | μA   |
| Typical thermal resistance (Note 2)   | $R_{\theta JA}$ | 55         |      |      |      |      |      |      |      | °C/W |
| Operating junction and storage temperature range  | $T_J, T_{STG}$  | -50to +150 |      |      |      |      |      |      |      | °C   |

#### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol   | symbol   | 1H1G | 1H2G | 1H3G | 1H4G | 1H5G | 1H6G | 1H7G | 1H8G | Unit |    |
|--|----------|------|------|------|------|------|------|------|------|------|----|
| Maximum instantaneous forward voltage at 1.0A  | $V_F$    | 1.0  |      |      | 1.3  |      | 1.85 |      |      | V    |    |
| Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$ | $I_R$    | 5.0  |      |      |      |      | 200  |      |      |      | μA |
| Typical reverse recovery time (Note 1)   | $t_{rr}$ | 50   |      |      |      |      | 70   |      |      | ns   |    |
| Typical junction capacitance at 4.0V, 1MHz   | $C_J$    | 20   |      |      |      |      | 15   |      |      | PF   |    |

#### NOTES:

1.  $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

# 1H1G thru 1H8G

## 2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

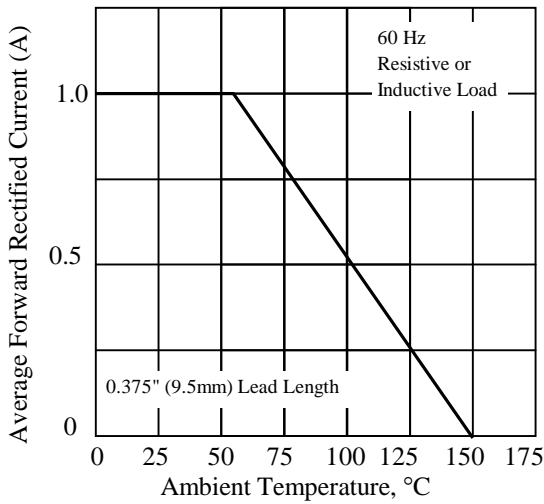


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

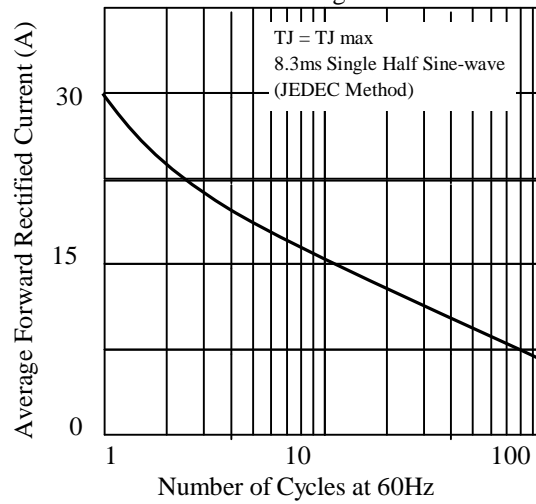


Fig 3. - Typical Instantaneous Forward Characteristics

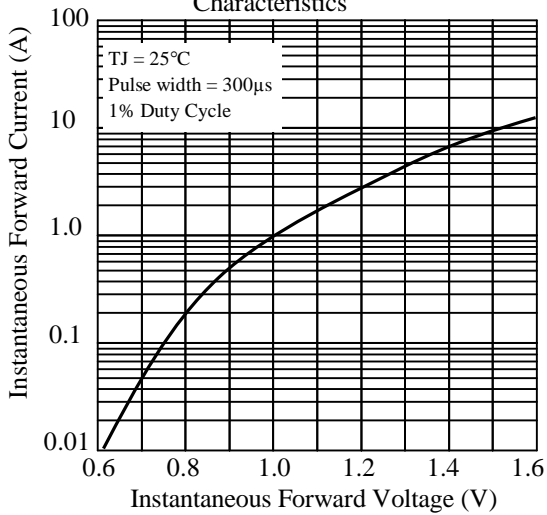


Fig 4. - Typical Reverse Characteristics

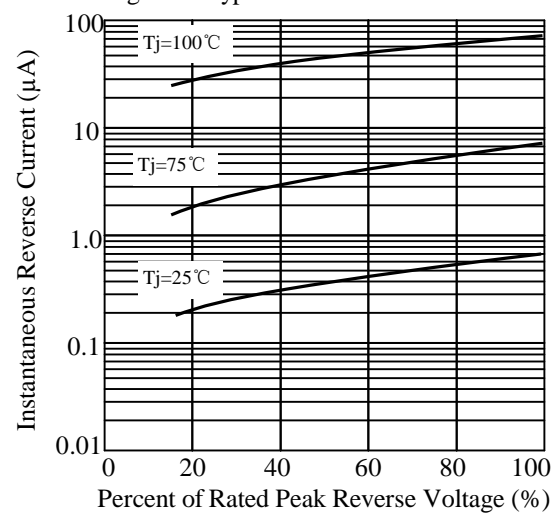


Fig 5. - typical transient thermal impedance

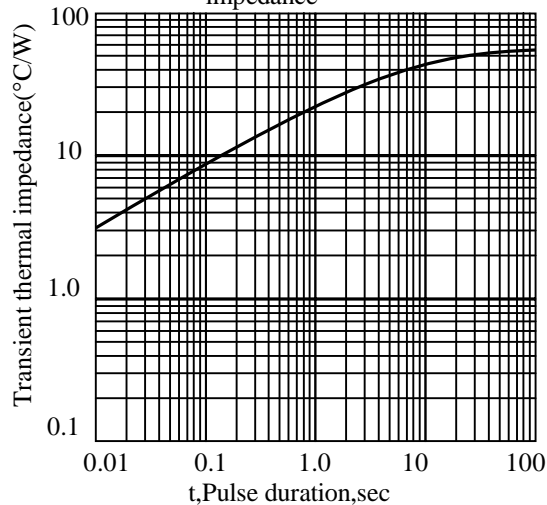
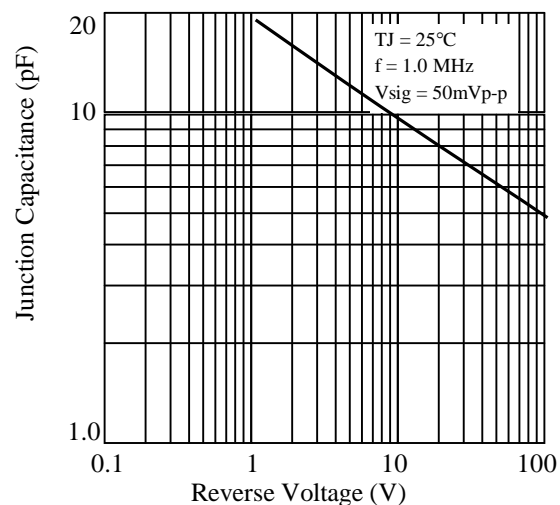
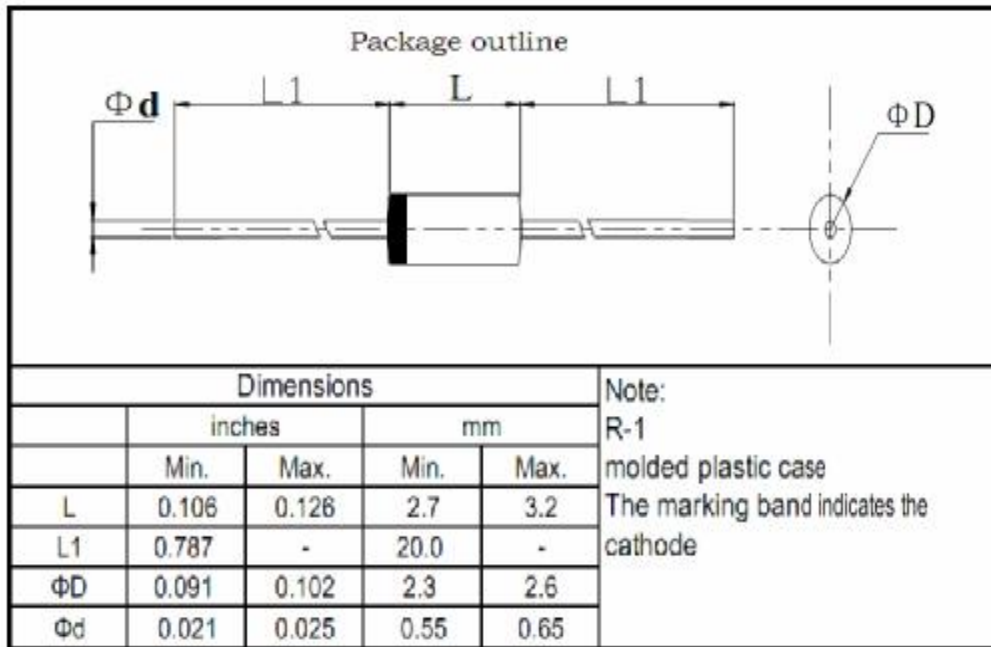


Fig 6. - Typical Junction Capacitance



## 1H1G thru 1H8G

### 3. dimension:

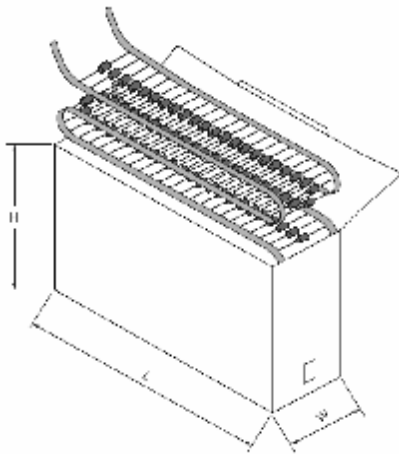


|     |               |
|-----|---------------|
| 标题: | 文件编号: WI-250  |
|     | 第 4 版 第 0 次修改 |
|     | 第 1 页         |

塑封生产线轴向产品包装规范

1 弹带盒装 ammo and box

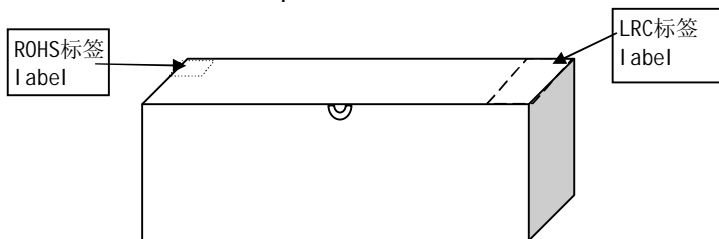
1.1. 弹带盒规格 ammo spec.



单位: mm

|     | L     | W    | H    |
|-----|-------|------|------|
| T52 | 262±2 | 76±2 | 90±2 |
| T42 | 262±2 | 64±2 | 90±2 |
| T26 | 250±3 | 45±3 | 95±3 |

1.2 弹带内盒要求 inner box spec.



|                             |               |
|-----------------------------|---------------|
| 标题:<br><b>塑封生产线轴向产品包装规范</b> | 文件编号: WI-250  |
|                             | 第 4 版 第 0 次修改 |
|                             | 第 2 页         |

1.4 标签要求 label spec.

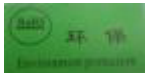
1.4.1 LRC标签 LRC label

成型 FORMING \*\*\*\*\* ← 成型规格forming spec.

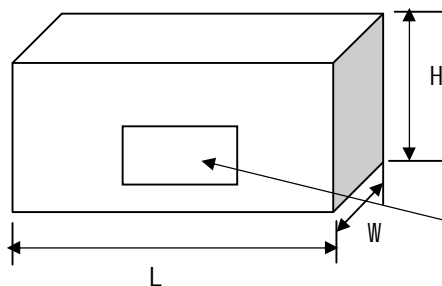
型号 TYPE \*\*\*\*\* ← LRC产品型号 type

|                                |       |                                   |
|--------------------------------|-------|-----------------------------------|
| 重复峰压 (V)<br>PRV (V)            | ****  | ← 产品重复峰压值 peak repetitive voltage |
| 额定电流 (A)<br>I <sub>o</sub> (A) | **    | ← 产品额定电流值 average output current  |
| 数量 (只)<br>QTY (pcs)            | ****  | ← 产品数量 quantity                   |
| 检验员<br>CHECKER                 | 02    |                                   |
| 日期:<br>DATE:                   | ***** | ← 产品生产日期 date                     |

1.4.2 环保标签 environmental protection label



2. 外箱规格 carton spec.



单位: mm

|     | L     | W     | H     |
|-----|-------|-------|-------|
| T52 | 430±2 | 280±2 | 225±2 |
| T42 | 410±2 | 285±2 | 300±2 |
| T26 | 435±3 | 280±3 | 295±3 |

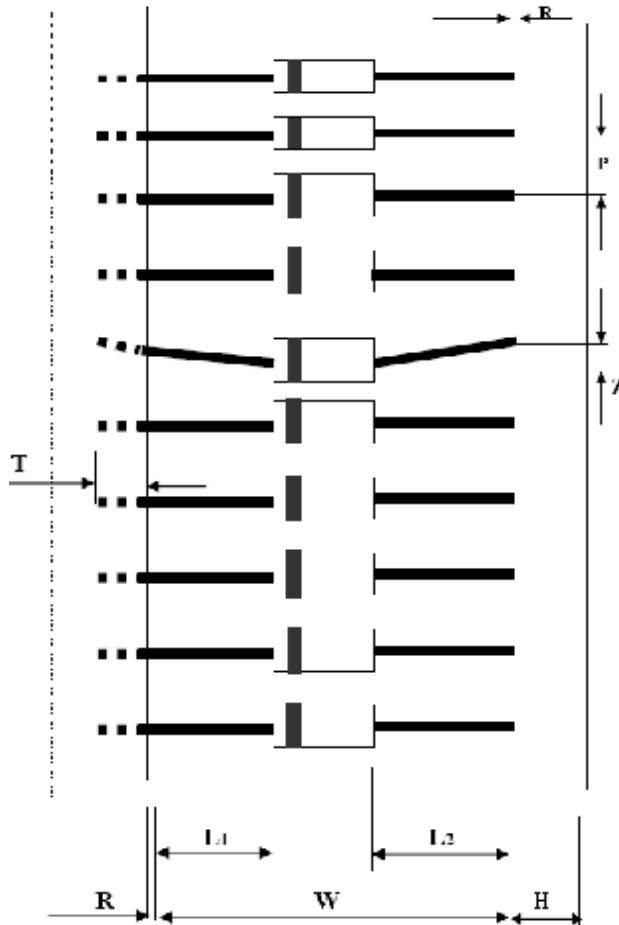
外箱标签cartoon label

3 按以上包装方式, 编带数量和外包装箱产品数量: typing and carton spec.

|                                  | 塑封外型                |       |                      |          |
|----------------------------------|---------------------|-------|----------------------|----------|
|                                  | A-405 & DO-41 & R-1 | R-3   | DO-15                | DO-201AD |
| 每根编带数量<br>quantity/ammo          | 3K                  | 1.8K  | 2K(T52)<br>1.8K(T26) | 0.8K     |
| 外箱数量 (T52编带)<br>quantity/cartoon | 30K                 | 18K   | 20K                  | 8.0K     |
| 外箱数量 (T26编带)<br>quantity/cartoon | 60K                 | 36K   | 36K                  | -        |
| 外箱数量 (T42编带)<br>quantity/cartoon | 54K                 | 32.4K | 36K                  | -        |

|                             |               |
|-----------------------------|---------------|
| 标题:<br><b>塑封生产线轴向产品包装规范</b> | 文件编号: WI-250  |
|                             | 第 4 版 第 0 次修改 |
|                             | 第 3 页         |

4 编带规格 brede spec



| 尺寸代号  | 编带尺寸 typing dimension |              |              |              |              |              |
|-------|-----------------------|--------------|--------------|--------------|--------------|--------------|
|       | 26/tape               | 35/tape      | 40/tape      | 42/tape      | 52/tape      | 52/tape#     |
| W     | 26 0.0/+1.6           | 35 -1.0/+0.5 | 40 -1.0/+0.5 | 42 -1.0/+1.0 | 52 -1.0/+2.0 | 52 -1.0/+2.0 |
| P     | 5±0.5                 | 5±0.5        | 5±0.5        | 5±0.5        | 5±0.5        | 10±0.5       |
| L1-L2 | <1.0                  | <1.0         | <1.0         | <1.0         | <1.2         | <1.2         |
| H     | 6±1.0                 | 6±1.0        | 6±1.0        | 6±1.0        | 6±1.0        | 6±1.0        |
| Z     | <1.0                  | <1.0         | <1.0         | <1.0         | <1.0         | <1.0         |
| R     | <1.0                  | <1.0         | <1.0         | <1.0         | <1.0         | <1.0         |
| T     | >3.5                  | >3.5         | >3.5         | >3.5         | >3.5         | >3.5         |

注: 52编带# 为DO-201AD编带规格 "52编带#" just for D0-201AD

1. 红白编带厚度为0.05mm; 两种胶带各自之间无明显色差; 编带要求均为胶带。  
The typing thickness is 0.05mm and color is obvious difference
2. 两端引带20~40cm. Typing lead over 20~40cm
3. 红色编带一端为二极管“负极”; 白色编带一端为二极管“正极”。  
red color is cathode ,white color is anode
4. 无卤 green epoxy compound (无卤产品才贴HF only)

**Green**

## 1H1G thru 1H8G

### 4. Update Record

| 版次 | 更新记录   | 更新作者 | 更新日期      |
|----|--------|------|-----------|
| 1  | 第一版    | 余波   | 2011-4-12 |
| 2  | 增加包装规范 | 周杰   | 2011-7-18 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)