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## 1N5624 thru 1N5627 Glass Passivated Junction Rectifier 3 Amp

### **Features:**

- Glass Passivated Cavity-Free Junction
- High Temperature Metallurgically Bonded Construction
- Hermetically Sealed Package
- Typical  $I_R$  Less Than  $0.1\mu A$
- 3 Amp Operation at  $T_A = +70^\circ C$  with No Thermal Runaway
- High Temperature Soldering Guaranteed

### **Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ C$ unless otherwise specified)

Maximum Repetitive Peak Reverse Voltage,  $V_{RRM}$

|        |      |
|--------|------|
| 1N5624 | 200V |
| 1N5625 | 400V |
| 1N5626 | 600V |
| 1N5627 | 800V |

Maximum RMS Voltage,  $V_{RMS}$

|        |      |
|--------|------|
| 1N5624 | 140V |
| 1N5625 | 280V |
| 1N5626 | 420V |
| 1N5627 | 560V |

Maximum DC Blocking Voltage,  $V_{DC}$

|        |      |
|--------|------|
| 1N5624 | 200V |
| 1N5625 | 400V |
| 1N5626 | 600V |
| 1N5627 | 800V |

Maximum Average Forward Rectified Forward Current,  $I_{(AV)}$

(.375" (9.5mm) Lead Length at  $T_A = +70^\circ C$ ) ..... 3A

Peak Forward Surge Current,  $I_{FSM}$

(8.3ms Single Half Sine-Wave Superimposed on Rated Load) ..... 125A

Maximum Instantaneous Forward Voltage (at 3A),  $V_F$

|                     |       |
|---------------------|-------|
| $T_A = +25^\circ C$ | 1V    |
| $T_A = +70^\circ C$ | 0.95V |

Maximum DC Reverse Current ( $V_{DC} =$  Rated Voltage),  $I_R$

|                      |             |
|----------------------|-------------|
| $T_A = +25^\circ C$  | 5 $\mu A$   |
| $T_A = +175^\circ C$ |             |
| 1N5624, 1N54625      | 300 $\mu A$ |
| 1N5627, 1N54628      | 200 $\mu A$ |

Maximum Full Load Reverse Current,  $I_{R(AV)}$

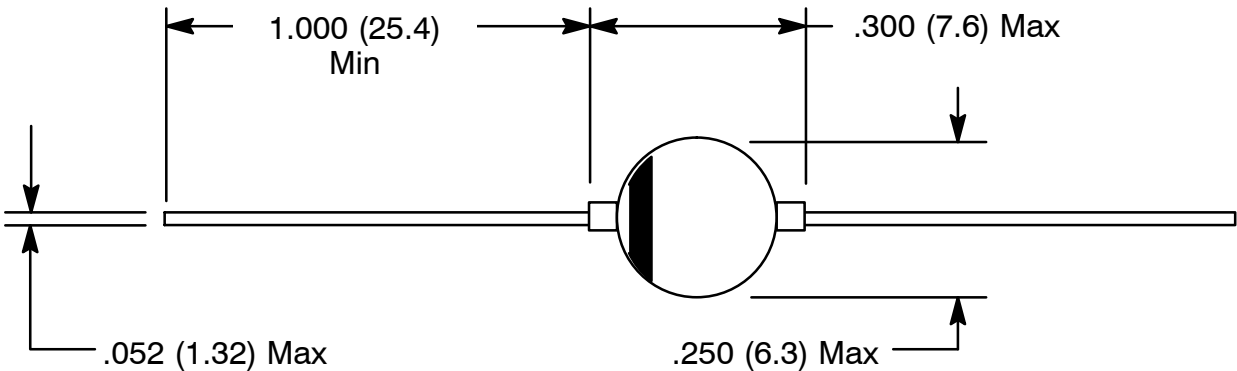
(Full Cycle Average, .375" (9.5mm) Lead Length at  $T_A = +70^\circ C$ )

|                 |             |
|-----------------|-------------|
| 1N5624, 1N54625 | 150 $\mu A$ |
| 1N5626, 1N54627 | 100 $\mu A$ |

**Maximum Ratings and Electrical Characteristics (Cont'd):** ( $T_A = +25^{\circ}\text{C}$  unless otherwise specified)

|                                                                            |                                         |
|----------------------------------------------------------------------------|-----------------------------------------|
| Typical Junction Capacitance (Note 1), $C_J$ .....                         | 40pF                                    |
| Typical Thermal Resistance, Junction-to-Ambient (Note 2), $R_{thJA}$ ..... | $+20^{\circ}\text{C/W}$                 |
| Typical Thermal Resistance, Junction-to-Lead (Note 2), $R_{thJL}$ .....    | $+10^{\circ}\text{C/W}$                 |
| Operating Junction Temperature Range, $T_J$ .....                          | $-65^{\circ}$ to $+175^{\circ}\text{C}$ |
| Storage Junction Temperature Range, $T_{stg}$ .....                        | $-65^{\circ}$ to $+200^{\circ}\text{C}$ |

- Note 1. Measured at 1Mhz and applied reverse voltage of 4V.
- Note 2. Thermal resistance from junction-to-ambient and from junction-to-lead at .375" (9.5mm) lead length with both leads attached between heatsinks.



Color Band Denotes Cathode