

## **SWITCHING DIODES**

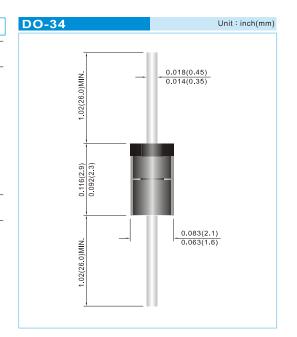
VOLTAGE 100 Volt POWER 500 mWatt

#### **FEATURES**

- · Fast switching Speed.
- Electrically Identical to Standard JEDEC
- · High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion.
- Lead free in compliance with EU RoHS 2011/65/EU directive

#### **MECHANICAL DATA**

- · Case: Molded Glass DO-34
- Terminals: Solderable per MIL-STD-750, Method 2026
- · Approx. Weight: 0.09 grams
- · Packing information
  - B 2K per Bulk box
  - T/R 10K per 15" plastic Reel
  - T/B 5K per horiz. tape & Ammo box



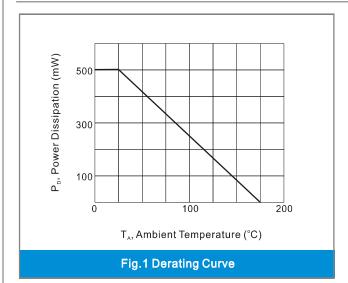
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TJ = 25°C unless otherwise noted)

| PARAMETER  | SYMBOL             | VALUE         | UNITS          |
|--|--------------------|---------------|----------------|
| Peak Reverse Voltage   | V <sub>RM</sub>    | 100           | V              |
| Surge Forward Current at t < 1s and T <sub>J</sub> = =25 °C  | <br> FSM           | 500           | mA             |
| Power Dissipation at T <sub>A</sub> = 25 °C  | P <sub>TOT</sub>   | 500           | mW             |
| Forward continuous current   | I <sub>F</sub>     | 300           | mA             |
| Maximum Forward Voltage at I <sub>F</sub> =10mA  | V <sub>F</sub>     | 1             | V              |
| Maximum Leakage Current at $V_R$ =20V at $V_R$ =75V at $V_R$ =20V , $T_J$ = 150°C                              | l <sub>R</sub>     | 25<br>5<br>50 | nA<br>μA<br>μA |
| Maximum Capacitance at V <sub>F</sub> = V <sub>R</sub> =0  | C <sub>J</sub>     | 4             | pF             |
| Maximum Reverse Recovery Time From $I_F = -I_R = 10$ mA to $I_{RR} = -1$ mA , $V_R = 6$ V $R_L = 100$ $\Omega$ | t <sub>rr</sub>    | 4             | ns             |
| Typical Thermal Resistance   | $R_{_{\theta JA}}$ | 300           | °C / W         |
| Junction Temperature and Storage Temperature Range   | $T_J$ , $T_S$      | -65 to +175   | °C             |

## NOTE:

- 1. CJ at  $V_R=0$ , f=1MHZ
- 2. From IF=10mA to IR=1mA, VR=6Volts, RL=100 $\Omega$





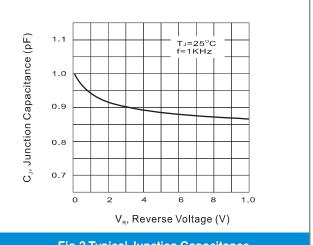
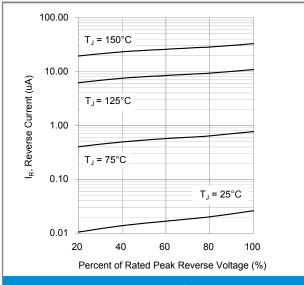


Fig.2 Typical Junction Capacitance





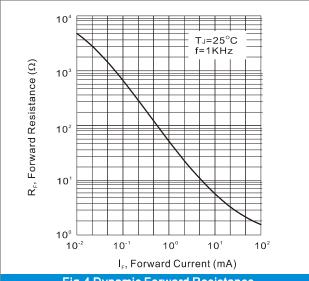
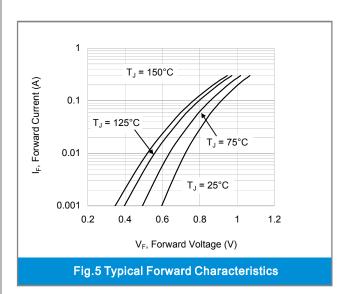


Fig.4 Dynamic Forward Resistance Versus Forward Current



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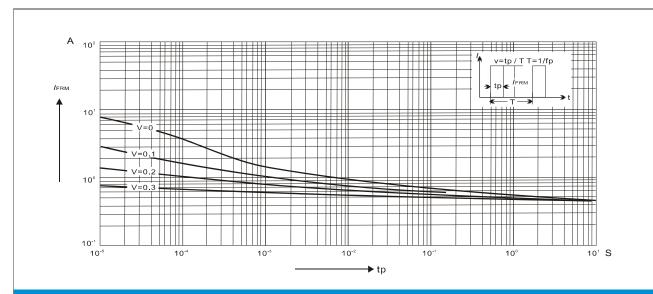


Fig. 6 Admissible Repetitive Peak Forward Current Versus Pulse Duration



## Part No\_packing code\_Version

1N4148-34\_AX\_10001 1N4148-34\_AY\_10001 1N4148-34\_B0\_10001 1N4148-34\_R2\_10001

## For example:



| Packing Code XX                      |                      |                                   | Version Code XXXXX   |            |                      |                                       |
|--------------------------------------|----------------------|-----------------------------------|----------------------|------------|----------------------|---------------------------------------|
| Packing type                         | 1 <sup>st</sup> Code | Packing size code                 | 2 <sup>nd</sup> Code | HF or RoHS | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| Tape and Ammunition Box (T/B)        | Α                    | N/A                               | 0                    | HF         | 0                    | serial number                         |
| Tape and Reel<br>(T/R)               | R                    | 7"                                | 1                    | RoHS       | 1                    | serial number                         |
| Bulk Packing<br>(B/P)                | В                    | 13"                               | 2                    |            |                      |                                       |
| Tube Packing<br>(T/P)                | Т                    | 26mm                              | X                    |            |                      |                                       |
| Tape and Reel (Right Oriented) (TRR) | S                    | 52mm                              | Y                    |            |                      |                                       |
| Tape and Reel (Left Oriented) (TRL)  | L                    | PANASERT T/B CATHODE UP<br>(PBCU) | U                    |            |                      |                                       |
| FORMING                              | F                    | PANASERT T/B CATHODE DOWN (PBCD)  | D                    |            |                      |                                       |

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