



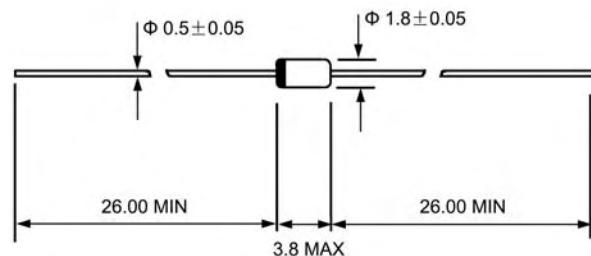
## Features

- ◇ For general purpose applications
- ◇ This diode features very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges

## Mechanical Data

- ◇ Case: JEDEC DO-35, glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx. 0.13 gram

### DO - 35(GLASS)



Dimensions in millimeters

## ABSOLUTE RATINGS

|  | Symbols   | Value             | UNITS |
|--|-----------|-------------------|-------|
| Continuous reverse voltage                         | $V_R$     | 30.0              | V     |
| Forward continuous current @ $T_A=25^\circ C$      | $I_F$     | 200 <sup>1)</sup> | mA    |
| Peak forward current @ $T_A=25^\circ C$            | $I_{FM}$  | 300 <sup>1)</sup> | mA    |
| Surge forward current @ $t_p < 1s, T_A=25^\circ C$ | $I_{FSM}$ | 5 <sup>1)</sup>   | A     |
| Power dissipation @ $T_A=65^\circ C$               | $P_{tot}$ | 200 <sup>1)</sup> | mW    |
| Junction temperature                               | $T_J$     | 125               | °C    |
| Ambient operating temperature range                | $T_A$     | -55 ---- 125      | °C    |
| Storage temperature range                          | $T_{STG}$ | -55 ---- 150      | °C    |

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

## ELECTRICAL CHARACTERISTICS

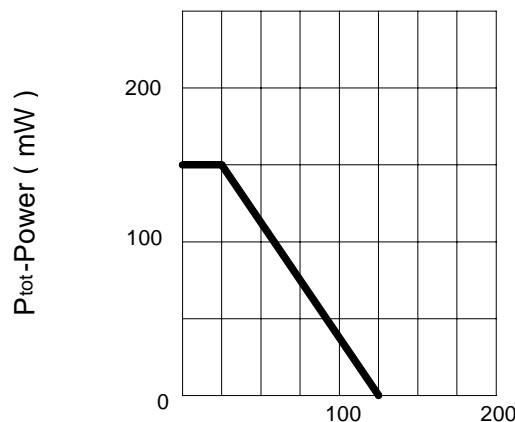
|  | Symbols         | Min. | Typ.                              | Max.              | UNITS   |
|--|-----------------|------|-----------------------------------|-------------------|---------|
| Reverse breakdown voltage  | $V_R$           | 30.0 |                                   |                   | V       |
| Forward voltage<br>Pulse test $t_p < 300 \mu s, \delta < 2\%$<br>@ $I_F=0.1mA$<br>@ $I_F=1mA$<br>@ $I_F=10mA$<br>@ $I_F=30mA$<br>@ $I_F=100mA$ | $V_F$           |      | 0.24<br>0.32<br>0.4<br>0.5<br>0.8 |                   | V       |
| Leakage current $V_R=25V$  | $I_R$           |      |                                   | 2.0               | $\mu A$ |
| Junction capacitance at $V_R=1V, f=1MHz$   | $C_J$           |      |                                   | 10                | pF      |
| Reverse recovery time @ $I_F=10mA, I_R=10mA, I_F=1mA$  | $t_{rr}$        |      |                                   | 5                 | ns      |
| Thermal resistance junction to ambient   | $R_{\theta JA}$ |      |                                   | 430 <sup>1)</sup> | °C/W    |

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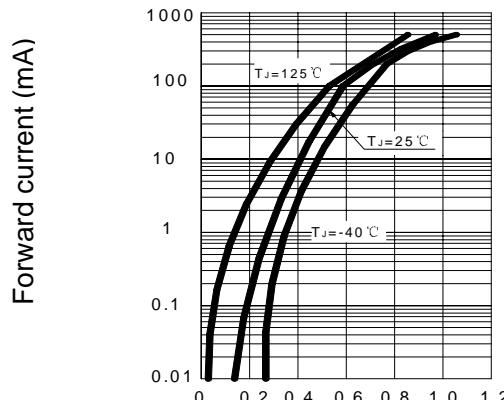
## Ratings AND Characteristic Curves

**FIG.1 – ADMISSIBLE POWER DISSIPATION VS. AMBIENT TEMPERATURE**



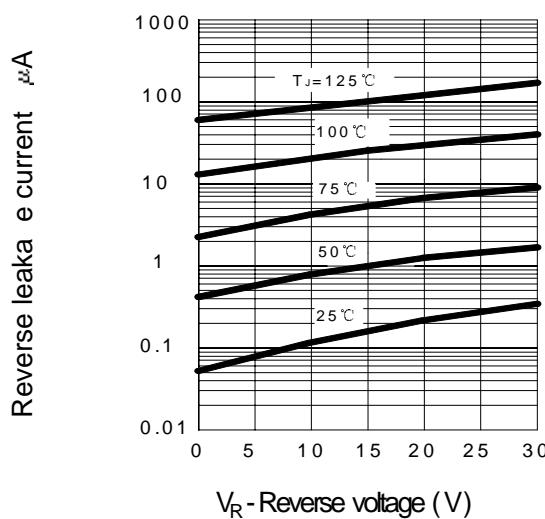
$T_A$  - Ambient temperature (°C)

**FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



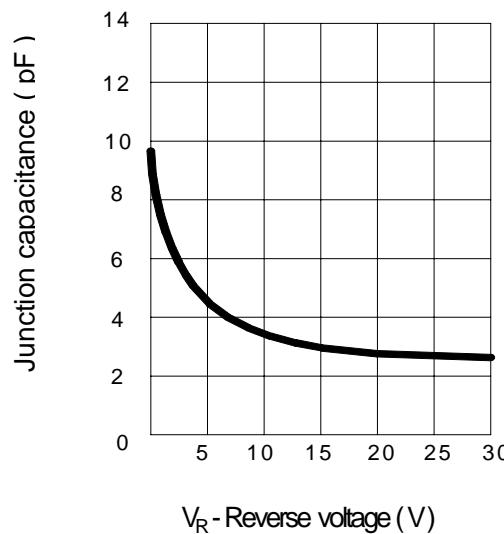
$V_F$  - Forward Voltage (V)

**FIG. 3 – TYPICAL REVERSE CHARACTERISTICS**



$V_R$  - Reverse voltage (V)

**FIG.4 – TYPICAL JUNCTION CAPACITANCE**



$V_R$  - Reverse voltage (V)

| PACKAGE | SPQ/PCS   | CARTON SPQ/PCS | CARTON SIZE/CM | CARTON GW/KG | CARTON NW/KG |
|---------|-----------|----------------|----------------|--------------|--------------|
| DO-35   | 5000/AMMO | 100000         | 41X28.5X38     | 14.57        | 13.07        |