

**VOLTAGE RANGE: 100V  
CURRENT: 100mA**

### Features

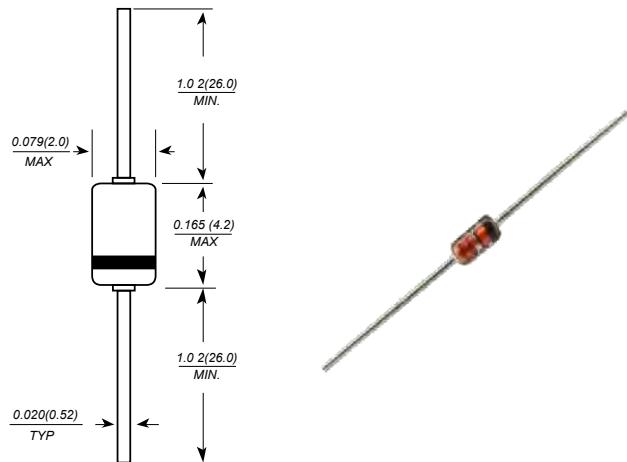
- For general purpose applications
- This diode features low turn-on voltage and high breakdown voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges

### Mechanical Data

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams



### DO-35(GLASS)



Dimensions in millimeters

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Continuous reverse voltage	$V_{RRM}$	100	V
Forward continuous current @ $T_A=25^\circ\text{C}$	$I_F$	100 <sup>1)</sup>	mA
Repetitive peak forward current tp 1s, 0.5	$I_{FRM}$	350 <sup>1)</sup>	mA
Surge forward current @ tp 10ms	$I_{FSM}$	750 <sup>1)</sup>	mA
Power dissipation @ $T_A=95^\circ\text{C}$	$P_{tot}$	100 <sup>1)</sup>	mW
Junction temperature	$T_J$	-55 ----+ 125	°C
Ambient operating temperature range	$T_L$	230	°C
Storage temperature range	$T_{STG}$	-55 ----+ 150	°C

1) On infinite heatsink with 4mm lead length.

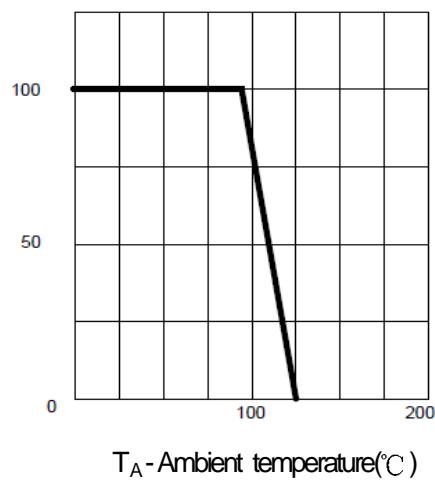
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage @ $I_R=100\mu\text{A}, T_j=25^\circ\text{C}$	$V_{BR}$	100	-	-	V
Forward voltage @ $I_F=1\text{mA}, T_j=25^\circ\text{C}$ @ $I_F=200\text{mA}, T_j=25^\circ\text{C}$	$V_F$	-	0.4	0.45	V
Leakage current @ $T_j=25^\circ\text{C}$ $VR=50\text{V}$ @ $T_j=100^\circ\text{C}$	$I_R$	-	-	0.1 20	$\mu\text{A}$
Junction capacitance at $VR=1\text{V}, f=1\text{MHz}$	$C_J$	-	-	20	pF
Thermal resistance junction to ambient	$R_{\theta JA}$	-	-	300 <sup>1)</sup>	°C/W

2)Pulse test tp<300  $\mu\text{s}$ ,  $\delta <2\%$

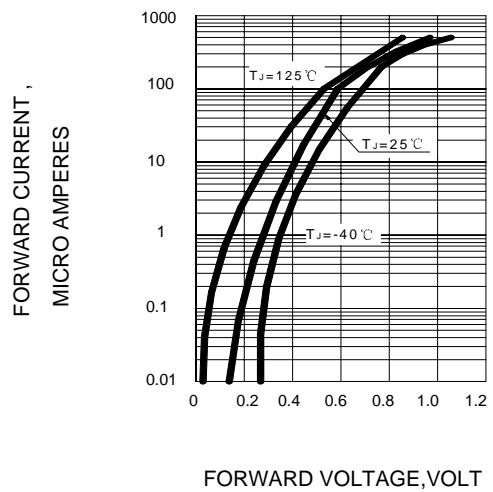


**Sunmate**

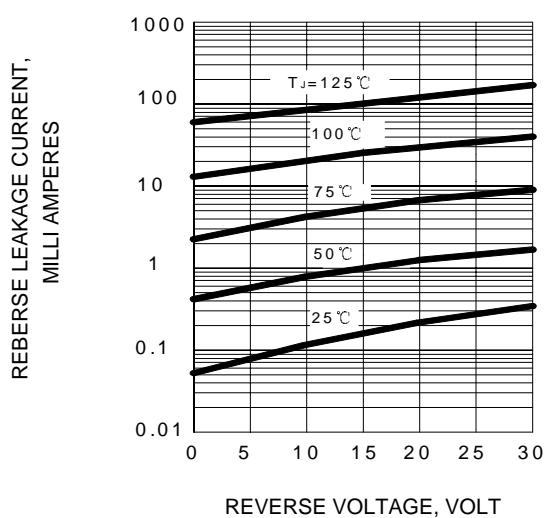
**FIG.1 – ADMISSIBLE POWER DISSIPATION VS.  
AMBIENT TEMPERATURE**



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



**FIG.3 – TYPICAL REVERSE CHARACTERISTICS**



**FIG4 – TYPICAL JUNCTION CAPACITANCE**

