

# BYX134GPL

**PRV : 4000 V**  
**Io : 50 mA**

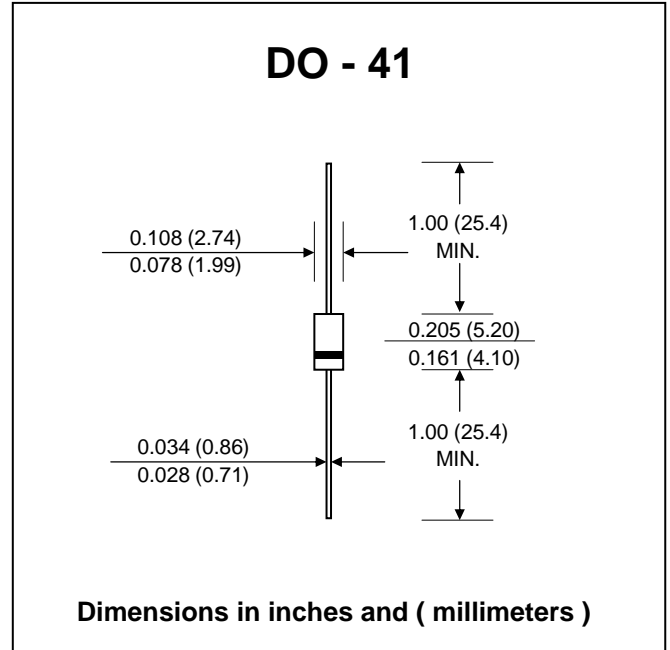
**FEATURES :**

- \* Glass passivated
- \* Excellent stability
- \* Low leakage current
- \* High maximum operating temperature
- \* Guaranteed avalanche energy absorption capability.
- \* **Pb / RoHS Free**

**MECHANICAL DATA :**

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.335 gram

## HIGH VOLTAGE AVALANCHE DIODE



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 50 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	4000	V
Maximum Working Reverse Voltage	$V_{RWM}$	4000	V
Min. Avalanche Breakdown Voltage at 100 $\mu$ A, $T_j = 25\text{ }^\circ\text{C}$	$V_{BR(min.)}$	5500	V
Max. Avalanche Breakdown Voltage at 100 $\mu$ A, $T_j = 25\text{ }^\circ\text{C}$	$V_{BR(max.)}$	7500	V
Maximum Average Forward Current	$I_{F(AV)}$	50	mA
Maximum Repetitive Peak Forward Current	$I_{FRM}$	500	mA
Maximum Non-Repetitive Peak Reverse Current ( $t = 100\text{ }\mu\text{s}$ triangular pulse; $T_{j(max)}$ prior to surge )	$I_{RSM}$	50	mA
Forward Voltage at $I_F = 10\text{ mA}$ , $T_j = 25\text{ }^\circ\text{C}$	$V_{F(Min)}$	5.0	V
	$V_{F(Max)}$	7.0	V
Maximum Reverse Current at $V_R = V_{RWMmax.}$ : $T_j = 25\text{ }^\circ\text{C}$ $V_R = V_{RWMmax.}$ : $T_j = 175\text{ }^\circ\text{C}$	$I_R$	1.0	$\mu$ A
	$I_{R(H)}$	30	$\mu$ A
Thermal Resistance From Junction to Ambient ( $T_a = T_L$ ; Lead Length = 10 mm )	$R_{th\ j-a}$	90	K/W
Maximum Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 175	$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES ( BYX134GPL )

FIG.1 - FORWARD CURRENT AS A FUNCTION OF MAXIMUM FORWARD VOLTAGE

