

# BYX134PL

# HIGH VOLTAGE AVALANCHE DIODE

**PRV : 4000 Volts**

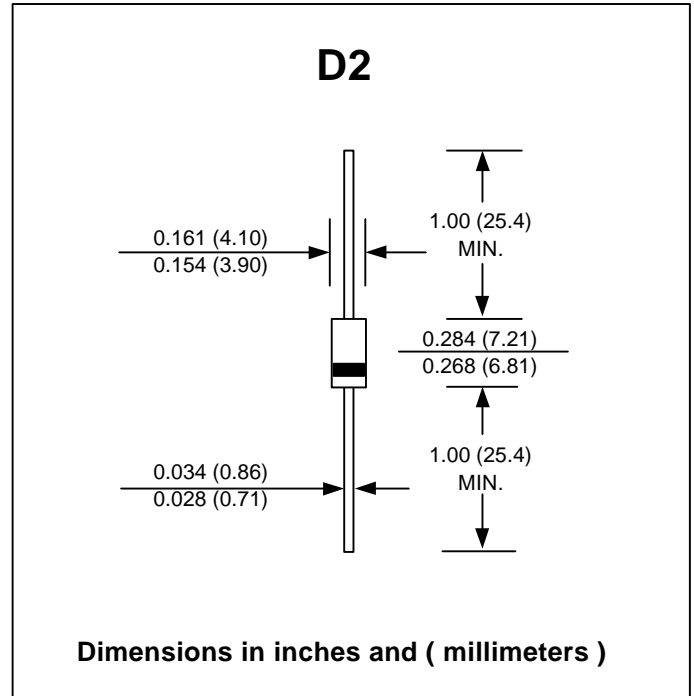
**Io : 50mA**

**FEATURES :**

- \* High maximum operating temperature
- \* Excellent stability
- \* High reliability
- \* Low reverse current
- \* **Pb / RoHS Free**

**MECHANICAL DATA :**

- \* Case : D2 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 : 0.465 gram



**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, $T_j = 25^\circ\text{C}$		$V_{BR(\text{min.})}$	5500	V
Max. Avalanche Breakdown Voltage at 100 $\mu$ A, $T_j = 25^\circ\text{C}$		$V_{BR(\text{max.})}$	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 $\mu$ s triangular pulse; $T_{j(\text{max})}$ prior to surge)		$I_{RSM}$	50	mA
Forward Voltage at	$I_F = 10 \text{ mA}, T_j = 25^\circ\text{C}$	$V_{F(\text{Min})}$	5.0	V
		$V_{F(\text{Max.})}$	7.0	V
Maximum Reverse Current	$V_R = V_{RWM\text{max.}}; T_j = 25^\circ\text{C}$	$I_R$	1.0	$\mu$ A
	$V_R = V_{RWM\text{max.}}; T_j = 175^\circ\text{C}$	$I_{R(H)}$	30	$\mu$ A
Thermal Resistance From Junction to Ambient ( $T_a=T_L$ ; Lead Length=10mm)		$R_{th \text{ j-a}}$	90	K/W
Maximum Junction Temperature		$T_j$	175	$^\circ\text{C}$
Storage Temperature Range		$T_{STG}$	- 55 to + 175	$^\circ\text{C}$