

BYX134PL

HIGH VOLTAGE AVALANCHE DIODE

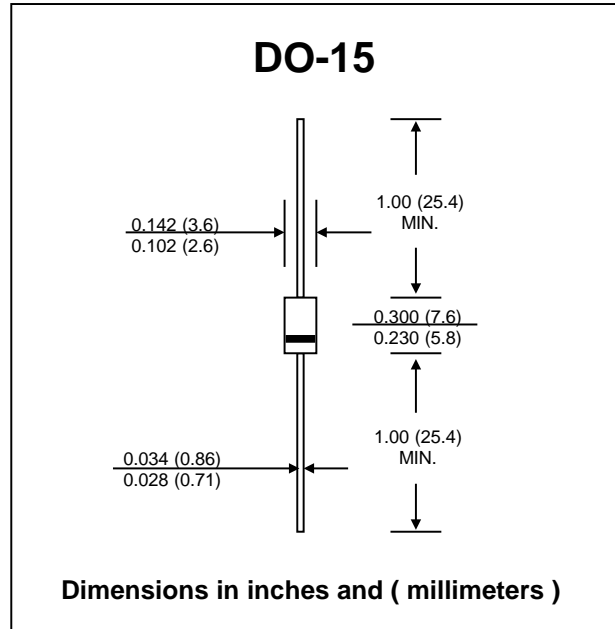
PRV : 4000 V
Io : 50 mA

FEATURES :

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

MECHANICAL DATA :

- * Case : DO-15 Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.4 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 μ A, $T_j = 25\text{ }^\circ\text{C}$	$V_{BR(min.)}$	5500	V	
Max. Avalanche Breakdown Voltage at 100 μ 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 μ 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	$V_R = V_{RWMmax.}$: $T_j = 25\text{ }^\circ\text{C}$	I_R	1.0	μ A
	$V_R = V_{RWMmax.}$: $T_j = 175\text{ }^\circ\text{C}$	$I_{R(H)}$	30	μ 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}	- 55 to + 175	$^\circ\text{C}$	