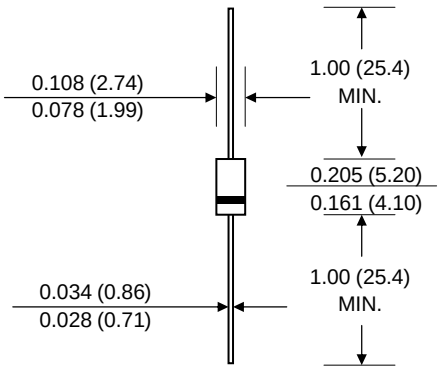
BYX134GPL

HIGH VOLTAGE AVALANCHE DIODE

PRV : 4000 V
Io : 50 mA

DO - 41



Dimensions in inches and (millimeters)

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

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

RATING AND CHARACTERISTIC CURVES (BYX134GPL)

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