

BYX134GPL

PRV : 4000 V

Io : 50 mA

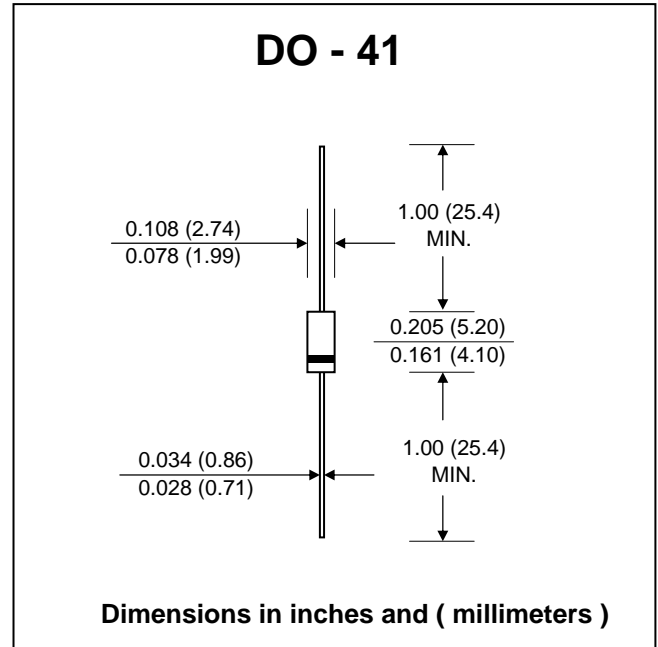
FEATURES :

- * Glass passivated junction chip
- * Excellent stability
- * Low leakage current
- * High maximum operating temperature
- * Guaranteed avalanche energy absorption capability.
- * Ideal for car ignition systems and automotive applications with extreme temperature requirements.
- * **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 AUTOMOTIVE IGNITION 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 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 ($t = 100\text{ }\mu\text{s}$ 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	μ A
	$I_{R(H)}$	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}	- 65 to + 175	$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES (BYX134GPL)

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

