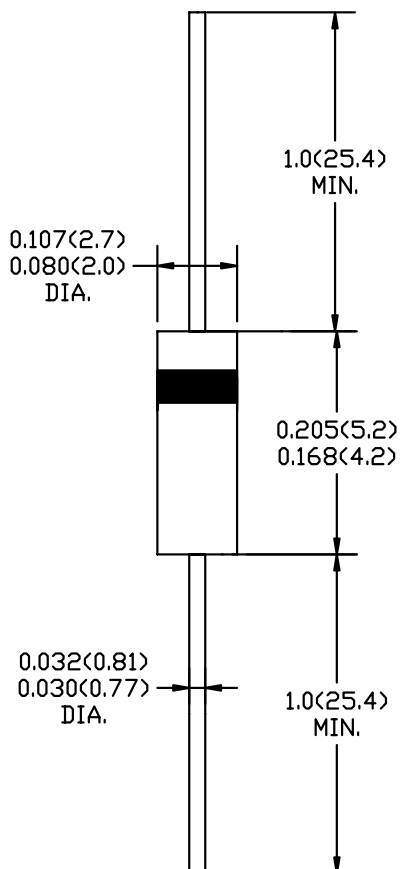


Case : DO- 41

Glass Passivated High Voltage Diodes

Reverse Voltage 4000V
Forward current 10 mA



Dimensions Inches and (mm)

Features

- Plastic package
- Glass passivated die construction
- High Reverse Voltage
- Low cost
- Plastic material has UL flammability recognition 94V-0
- Polyimide coating on die stack

Application

- Car ignition systems
- Automotive applications with extreme temperature requirements

Mechanical Data

Case: Molded plastic case

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Marked on Body

Mounting Position: Any

Weight: 0.33g (Approximately)

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Symbol	Conditions	Values			Unit
		MIN.	TYP.	MAX.	
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	4000	-	6500	V
V_{RMS}	Maximum RMS Voltage	2800	-	-	V
V_{DC}	Maximum DC Blocking Voltage	4000	-	-	V
$I_{F(AV)}$	Maximum average forward current Half sine-wave $f=60\text{Hz}$ $T_A = 25^\circ\text{C}$	10	-	100	mA
I_{FSM}	Peak forward surge current single half sine-wave 8.3ms, $f=60\text{Hz}$	25	-	30	A
V_F	Instantaneous Forward Voltage at 10mA DC	3.0	-	3.8	V
I_R	Reverse leakage current $V_R=V_{RRM}$ $T_A=25^\circ\text{C}$	-	-	1.0	μA
I_R	Reverse leakage current $V_R=V_{RRM}$ $T_A=175^\circ\text{C}$	30	250	300	μA
T_j	Operating Junction	-65	-	+175	$^\circ\text{C}$
T_{STG}	Storage temperature range	-65	-	+175	$^\circ\text{C}$
t_{rr}	Reverse recovery time $I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$	800	-	-	ns
E_R	Non repetitive reverse energy $I_{(BR)R}=80\text{mA}$, inductive load	15	-	-	mJ
Lead tensile strength		400	-	550	N/mm^2

Performance Curves

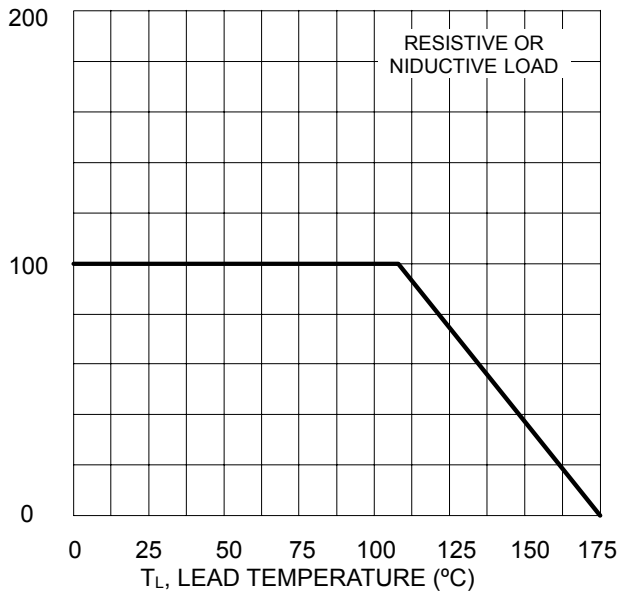


Fig.1 Forward Current Derating Curve

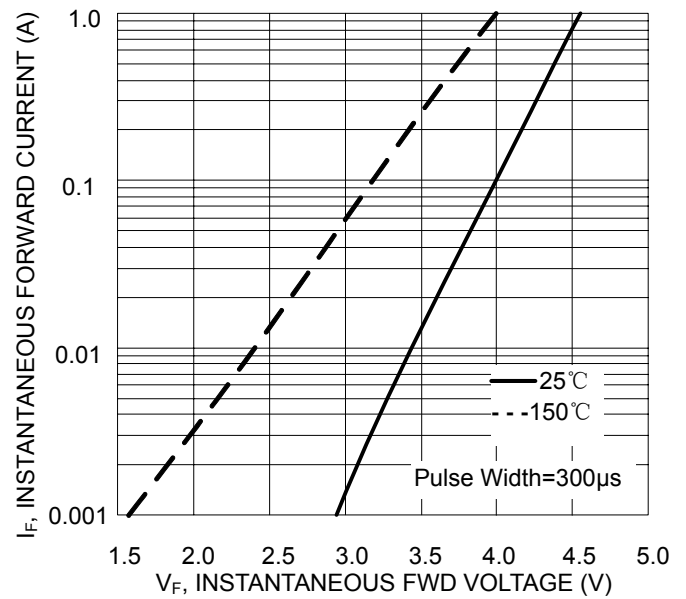


Fig.2 Typical Forward Characteristics

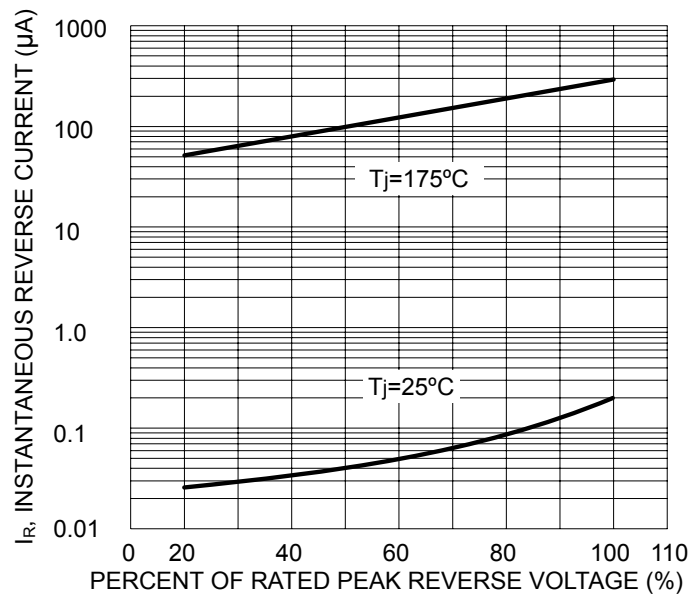


Fig.3 Typical Reverse Characteristics