

# FHVR125G

## FAST RECOVERY HIGH VOLTAGE RECTIFIER DIODE

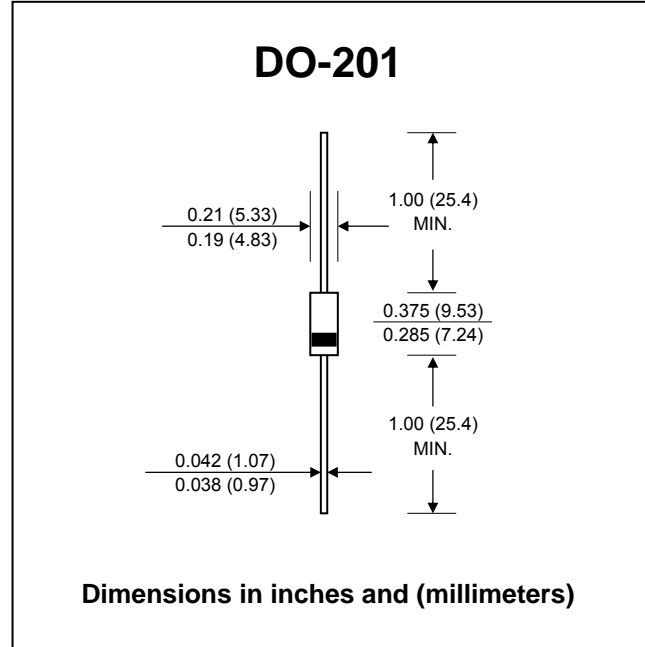
**PRV : 2500 Volts**  
**Io : 1.5 Ampere**

### FEATURES :

- \* Glass passivated junction chip
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : DO-201 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 except Bipolar.
- \* Mounting position : Any
- \* Weight : 0.93 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

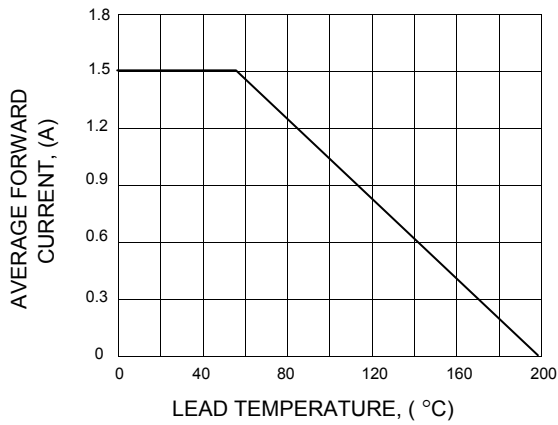
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	2500	V
Maximum Surge Peak Reverse Voltage	$V_{RSM}$	1750	V
Maximum DC Blocking Voltage	$V_{DC}$	2500	V
Maximum Average Forward Current, $T_L = 55\text{ }^\circ\text{C}$ $T_L = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	1.5 1.0	A
Maximum Peak Forward Surge Current, 1 cycle surge $t_p=8.3\text{ms}$ $T_a = 25\text{ }^\circ\text{C}$	$I_{FSM}$	60	A
Maximum Forward Voltage $I_F = 2\text{ A}$ , $T_j = 25\text{ }^\circ\text{C}$	$V_F$	6.5	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	$I_R$ $I_{R(H)}$	1.0 25	$\mu\text{A}$ $\mu\text{A}$
Typical Junction Capacitance , at 50 $V_{DC}$ 1kHz	$C_J$	20	pF
Thermal Impedance	$\theta_{J-L}$	L=.000	3 $^\circ\text{C/W}$
		L=.125	6 $^\circ\text{C/W}$
		L=.250	12 $^\circ\text{C/W}$
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	200	ns
Junction Temperature Range	$T_J$	- 65 to + 175	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 200	$^\circ\text{C}$

#### Notes :

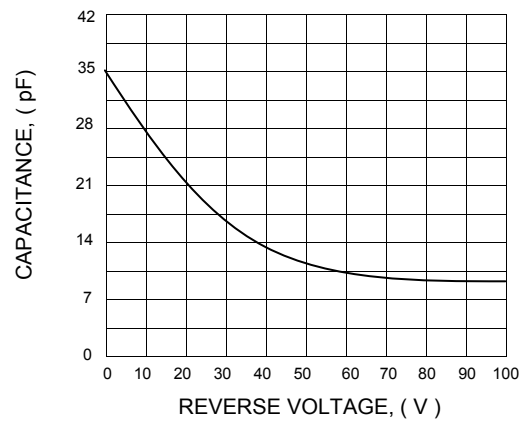
- ( 1 ) Reverse Recovery Test Conditions :  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

**RATING AND CHARACTERISTIC CURVES ( FHVR125G )**

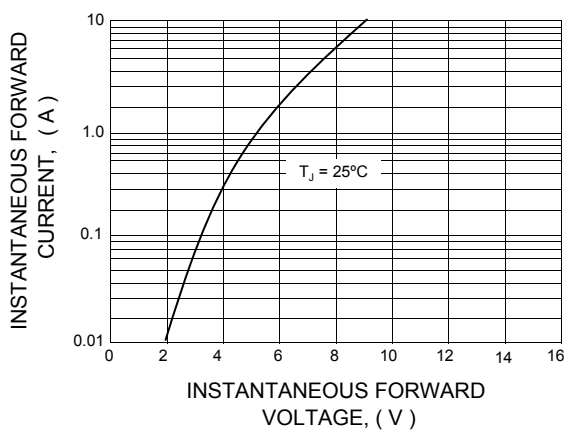
**FIG.1 - CURRENT DERATING, LEAD**



**FIG.2 - TYPICAL JUNCTION CAPACITANCE**



**FIG.3 - TYPICAL FORWARD VOLTAGE**



**FIG.4 - MAXIMUM REVERSE CURRENT**

