

Z25FG

FAST RECOVERY RECTIFIER DIODE

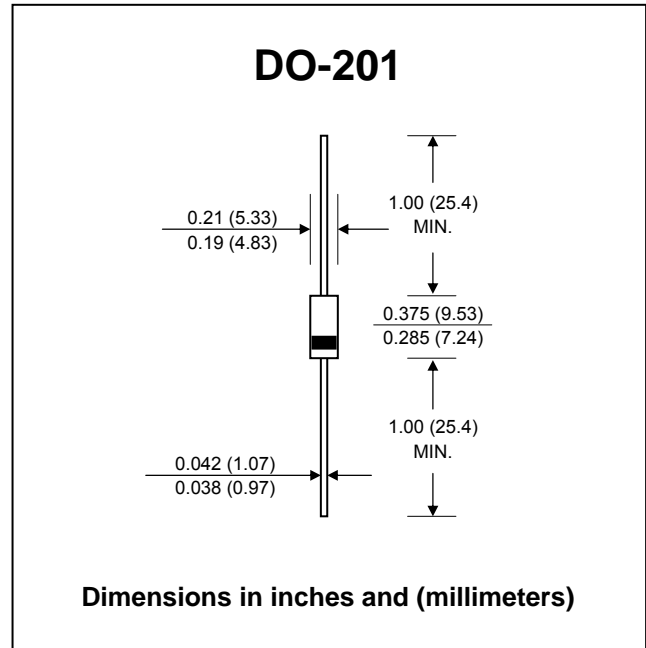
PRV : 2500 Volts
Io : 1.5 Ampere

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-O 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 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 $T_a = 25\text{ }^\circ\text{C}$	I_R	1.0	μA
at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	$I_{R(H)}$	25	μA
Typical Junction Capacitance , at 50 V_{DC} 1kHz	C_J	20	pF
Thermal Impedance	θ_{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 (Z25FG)

FIG.1 - CURRENT DERATING, LEAD

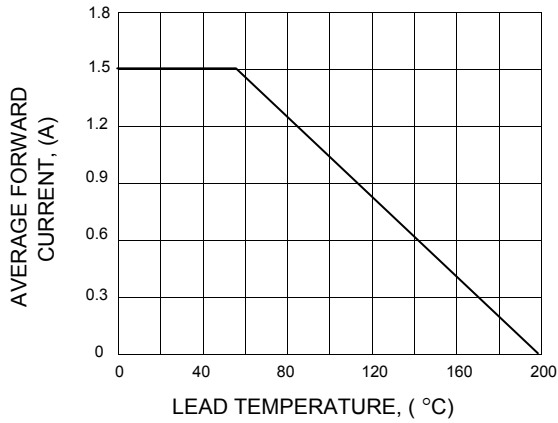


FIG.2 - TYPICAL JUNCTION CAPACITANCE

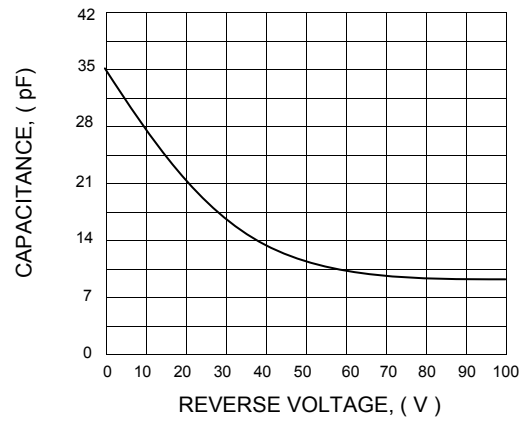


FIG.3 - TYPICAL FORWARD VOLTAGE

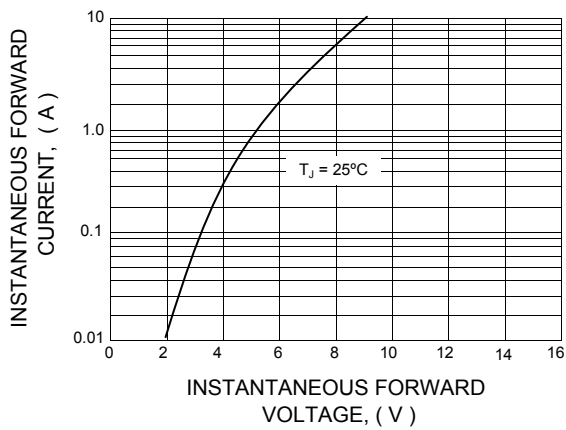


FIG.4 - MAXIMUM REVERSE CURRENT

