

**FAST RECOVERY
GLASS PASSIVATED RECTIFIERS**

**REVERSE VOLTAGE – 1000 Volts
FORWARD CURRENT – 3.0 Amperes**

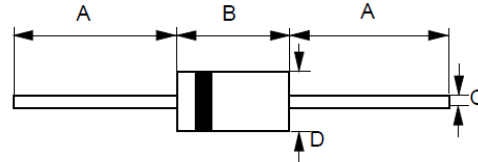
FEATURES

- Fast switching for high efficiency
- Glass passivated chip
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. “Green” Device (Note 3)**

MECHANICAL DATA

- Package: JEDEC DO-201AD molded plastic
- Polarity: Color band denotes cathode
- Weight: 1.1 grams
- Mounting position: Any

DO-201AD



DO-201AD		
Dim	Min.	Max.
A	25.4	--
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	PR3007G	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current	@ $T_J = 55^\circ\text{C}$ $I_{(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	125	A
Maximum Forward Voltage at 3.0A DC	V_F	1.3	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_J = 25^\circ\text{C}$ @ $T_J = 125^\circ\text{C}$ I_R	5 100	μA
Typical Junction Capacitance (Note 4)	C_T	50	pF
Typical Thermal Resistance (Note 5)	R_{thJA} R_{thJL} R_{thJC}	30 10 10	$^\circ\text{C/W}$
Maximum Reverse Recovery Time (Note 6)	t_{rr}	500	ns
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Notes:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal Resistance Junction to Ambient, Lead and Case.
6. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\mu\text{s}$.

RATING AND CHARACTERISTIC CURVES
PR3007G(LS)

FIG.1 - FORWARD CURRENT DERATING CURVE

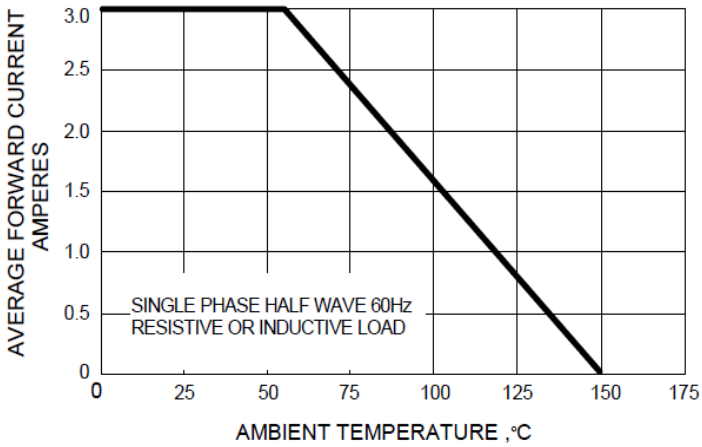


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

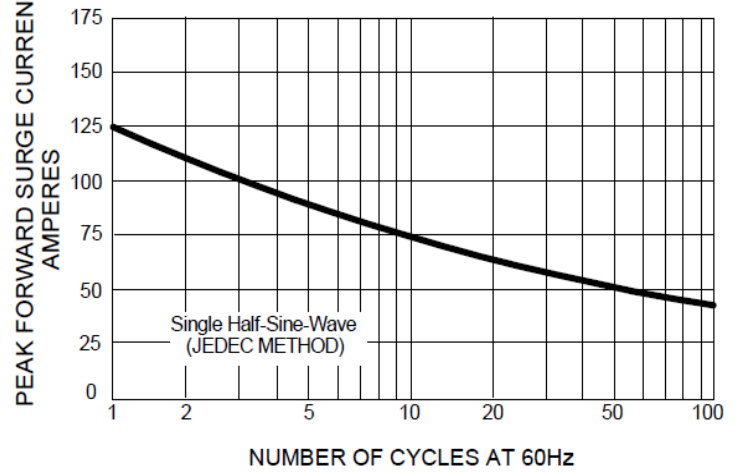


FIG.3 - TYPICAL JUNCTION CAPACITANCE

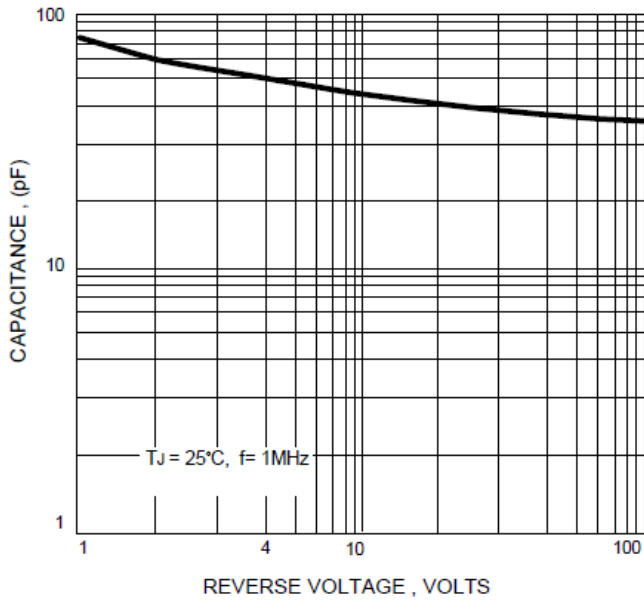
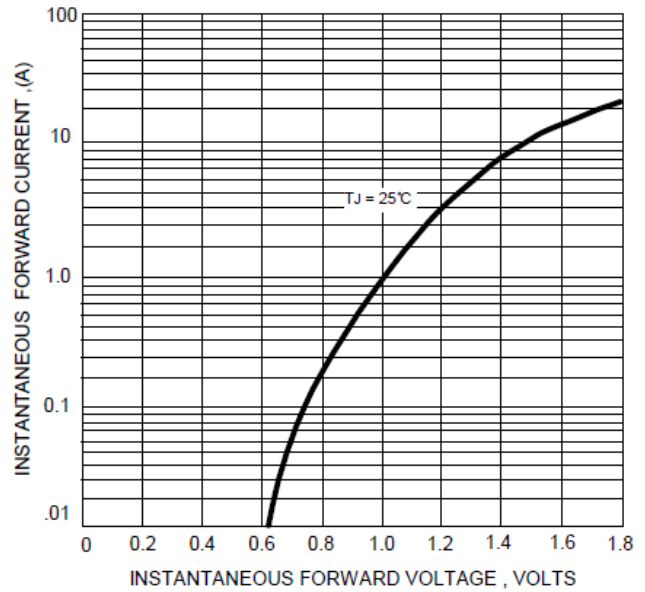


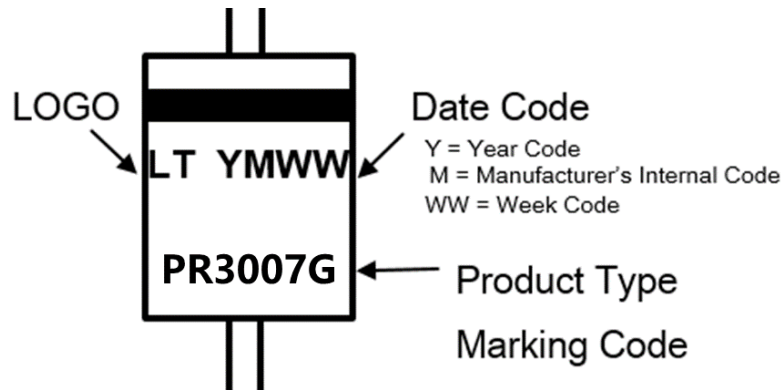
FIG.4 - TYPICAL FORWARD CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
PR3007G_HF	DO-201AD	1200pcs	Reel

Marking Information :



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