



# UF150G~UF156G

## GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 600 Volts **CURRENT** 1.5 Amperes

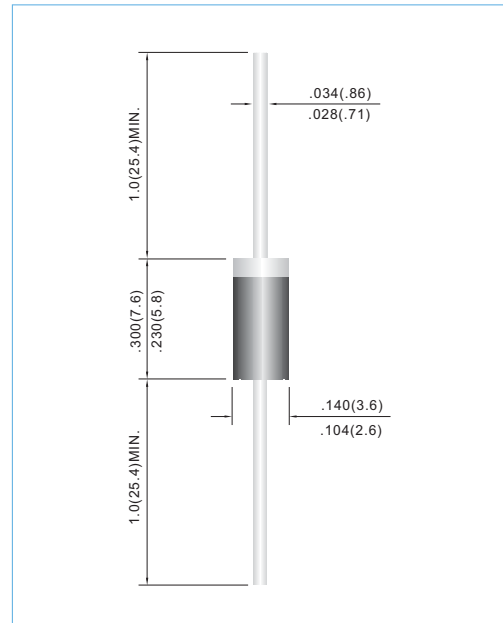
**DO-15** Unit: inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast recovery for high efficiency.
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Band denotes cathode
- Mounting Position: Any
- Weight: 0.014 ounce, 0.397 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

| PARAMETER  | SYMBOL          | UF150G      | UF151G | UF152G | UF154G | UF156G | UNITS                       |
|--|-----------------|-------------|--------|--------|--------|--------|-----------------------------|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$       | 50          | 100    | 200    | 400    | 600    | V                           |
| Maximum RMS Voltage  | $V_{RMS}$       | 35          | 70     | 140    | 280    | 420    | V                           |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 50          | 100    | 200    | 400    | 600    | V                           |
| Maximum Average Forward Current .375" (9.5mm) lead length at $T_A=55^\circ\text{C}$                    | $I_{F(AV)}$     | 1.5         |        |        |        |        | A                           |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)     | $I_{FSM}$       | 50          |        |        |        |        | A                           |
| Maximum Forward Voltage at 1.5A  | $V_F$           | 1.0         |        |        | 1.3    | 1.7    | V                           |
| Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=125^\circ\text{C}$ | $I_R$           |             |        |        | 1.0    | 150    | $\mu\text{A}$               |
| Typical Junction capacitance (Note 1)  | $C_J$           | 25          |        |        |        |        | pF                          |
| Typical Thermal Resistance (Note 2)  | $R_{\theta JA}$ | 50          |        |        |        |        | $^\circ\text{C} / \text{W}$ |
| Maximum Reverse Recovery Time (Note 3)   | $t_{rr}$        | 50          |        |        |        | 100    | ns                          |
| Operating Junction and Storage Temperature Range   | $T_J, T_{STG}$  | -55 to +150 |        |        |        |        | $^\circ\text{C}$            |

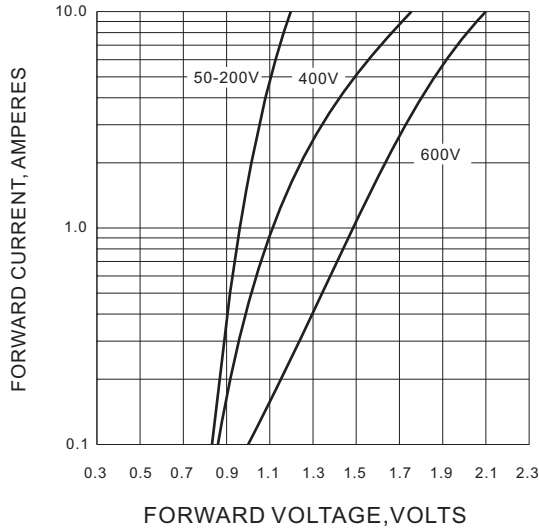
#### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient.
3. Reverse Recovery Time  $I_F=.5A, I_R=1A, I_{rr}=.25A$

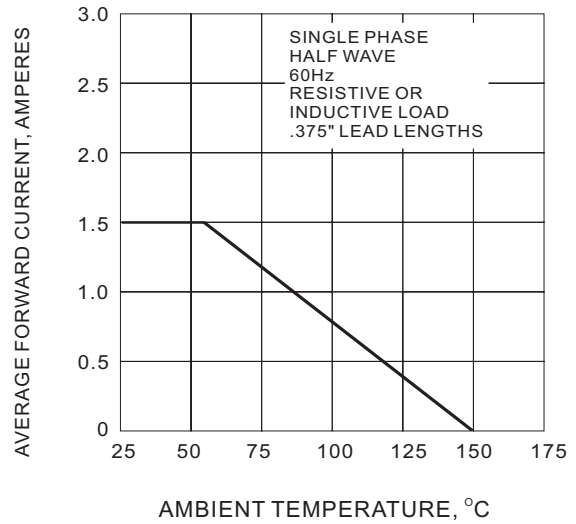


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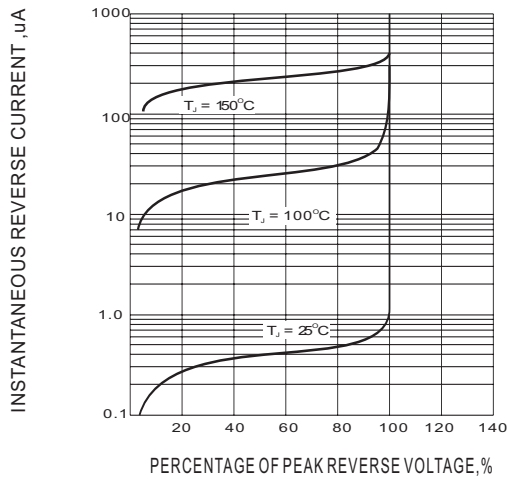
## RATING AND CHARACTERISTIC CURVES



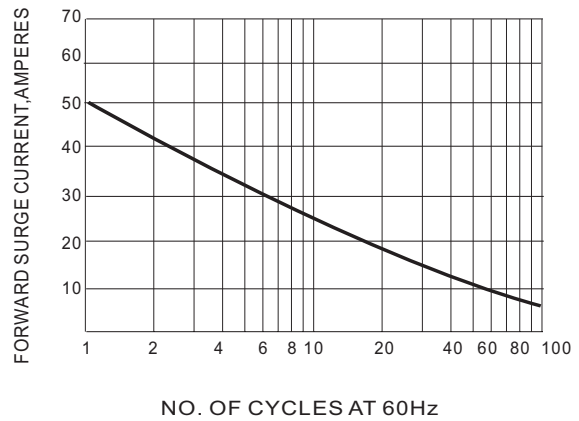
**Fig. 1 FORWARD CHARACTERISTICS**



**Fig. 2 FORWARD CURRENT DERATING CURVE**



**Fig. 3- TYPICAL REVERSE CHARACTERISTIC**



**Fig. 4 PEAK FORWARD SURGE CURRENT**