



# UF150G~UF1510G

## GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 1000 Volt **CURRENT** 1.5 Ampere

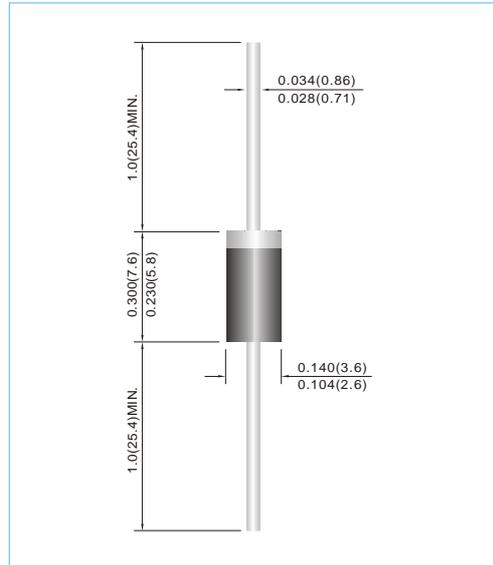
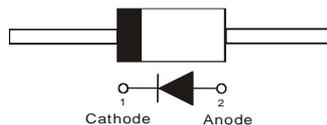
**DO-15** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Ultra fast recovery for high efficiency.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- 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 | UF158G | UF1510G | UNITS                       |
|-----------------------------------------------------------------------------------------------------------|-----------------|-------------|--------|--------|--------|--------|--------|---------|-----------------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                    | $V_{RRM}$       | 50          | 100    | 200    | 400    | 600    | 800    | 1000    | V                           |
| Maximum RMS Voltage                                                                                       | $V_{RMS}$       | 35          | 70     | 140    | 280    | 420    | 560    | 700     | V                           |
| Maximum DC Blocking Voltage                                                                               | $V_{DC}$        | 50          | 100    | 200    | 400    | 600    | 800    | 1000    | V                           |
| Maximum Average Forward Current 0.375"(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                       | $I_{FSM}$       | 50          |        |        |        |        |        |         | A                           |
| Maximum Forward Voltage at 1.5A                                                                           | $V_F$           |             | 1      |        | 1.3    |        | 1.7    |         | V                           |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$<br>$T_J=125^\circ\text{C}$ | $I_R$           |             |        |        | 1      |        | 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 |        |        |        |        |        |         | $^\circ\text{C}$            |

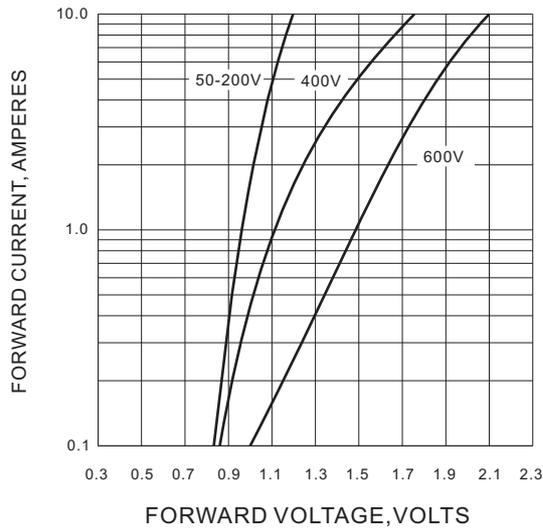
### NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Thermal Resistance from Junction to Ambient.
3. Reverse Recovery Time  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$

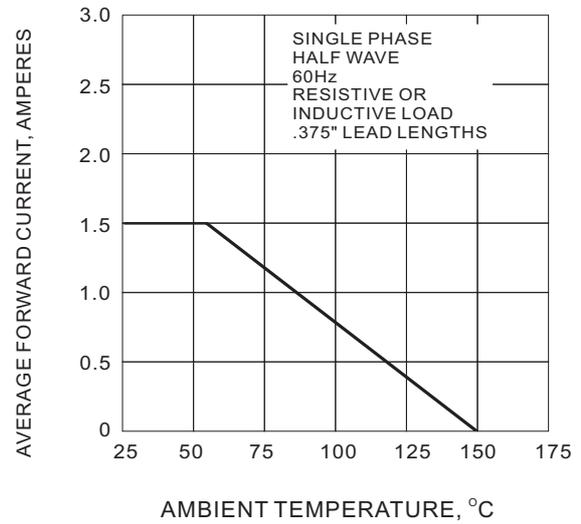


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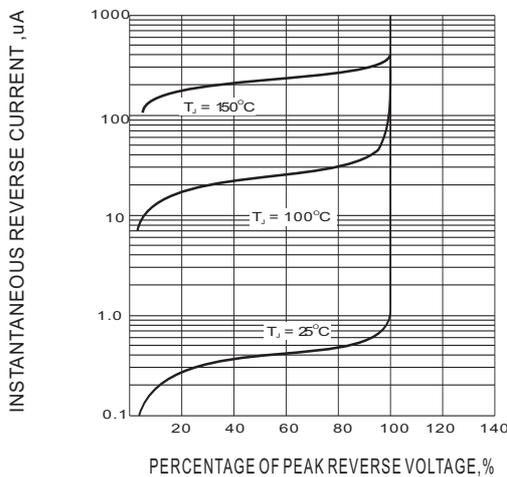
## RATING AND CHARACTERISTIC CURVES



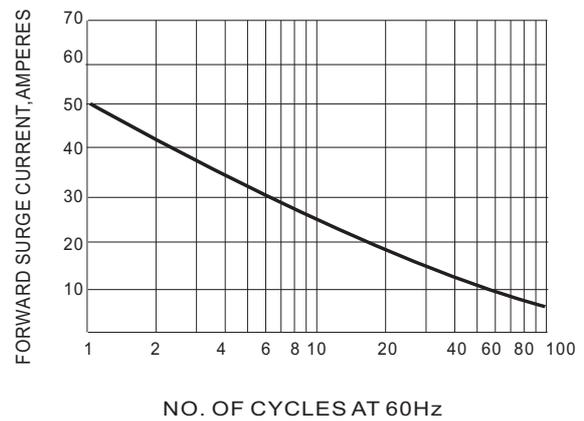
**Fig. 1 FORWARD CHARACTERISTICS**



**Fig. 2 FORWARD CURRENT DERATING CURVE**



**Fig. 3- TYPICAL REVERSE CHARACTERISTIC**



**Fig. 4 PEAK FORWARD SURGE CURRENT**



## UF150G~UF1510G

### Part No\_packing code\_Version

UF150G\_AY\_00001  
 UF150G\_AY\_10001  
 UF150G\_B0\_00001  
 UF150G\_B0\_10001  
 UF150G\_R2\_00001  
 UF150G\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



| Packing Code <b>XX</b>               |                      |                                  |                      | Version Code <b>XXXXX</b> |                      |                                       |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type                         | 1 <sup>st</sup> Code | Packing size code                | 2 <sup>nd</sup> Code | HF or RoHS                | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| Tape and Ammunition Box (T/B)        | A                    | N/A                              | 0                    | HF                        | 0                    | serial number                         |
| Tape and Reel (T/R)                  | R                    | 7"                               | 1                    | RoHS                      | 1                    | serial number                         |
| Bulk Packing (B/P)                   | B                    | 13"                              | 2                    |                           |                      |                                       |
| Tube Packing (T/P)                   | T                    | 26mm                             | X                    |                           |                      |                                       |
| Tape and Reel (Right Oriented) (TRR) | S                    | 52mm                             | Y                    |                           |                      |                                       |
| Tape and Reel (Left Oriented) (TRL)  | L                    | PANASERT T/B CATHODE UP (PBCU)   | U                    |                           |                      |                                       |
| FORMING                              | F                    | PANASERT T/B CATHODE DOWN (PBCD) | D                    |                           |                      |                                       |



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