



# DATA SHEET

## UF150 thru UF1510

### ULTRAFAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.5 Amperes

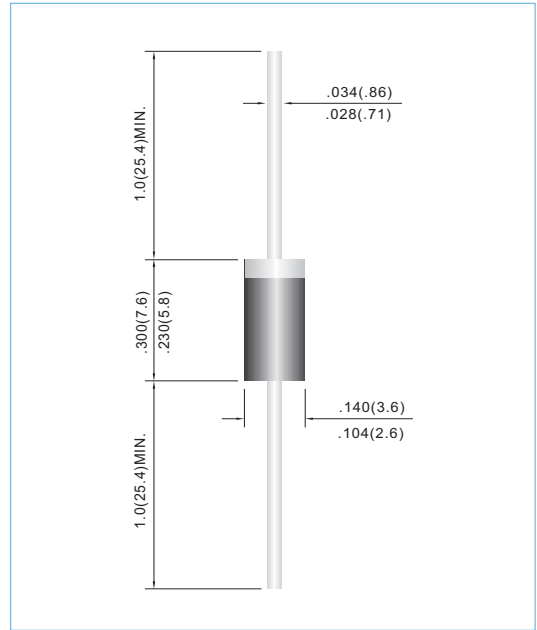
**DO-15** Unit: inch(mm)

#### 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.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, DO-15  
 Terminals: Axial leads, solderable per MIL-STD-202G, Method 208  
 Polarity: Band denotes cathode  
 Mounting Position: Any  
 Weight: 0.015 ounce, 0.4 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          | UF150       | UF151 | UF152 | UF154 | UF156 | UF158 | UF1510 | 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 .375" (9.5mm) lead length at $T_A=55^\circ C$                      | $I_{AV}$        | 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         |       | 1.1   |       | 1.7   |       | V      |                |
| Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$         | $I_R$           | 10.0<br>150 |       |       |       |       |       |        | $\mu A$        |
| Typical Junction capacitance (Note 1)  | $C_J$           | 25          |       |       |       |       |       |        | pF             |
| Typical Thermal Resistance (Note 2)  | $R_{\theta JA}$ | 50          |       |       |       |       |       |        | $^\circ C / W$ |
| Maximum Reverse Recovery Time (Note 3)   | $T_{RR}$        | 50          |       |       |       | 75    |       |        | ns             |
| Operating Junction and Storage Temperature Range   | $T_J, T_{STG}$  | -55 TO +150 |       |       |       |       |       |        | $^\circ C$     |

#### 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  $I_F=.5A, I_R=1A, I_{rr}=.25A$



**RATING AND CHARACTERISTIC CURVES**

