



UF150 ~ UF1510

ULTRAFAST RECOVERY RECTIFIERS

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

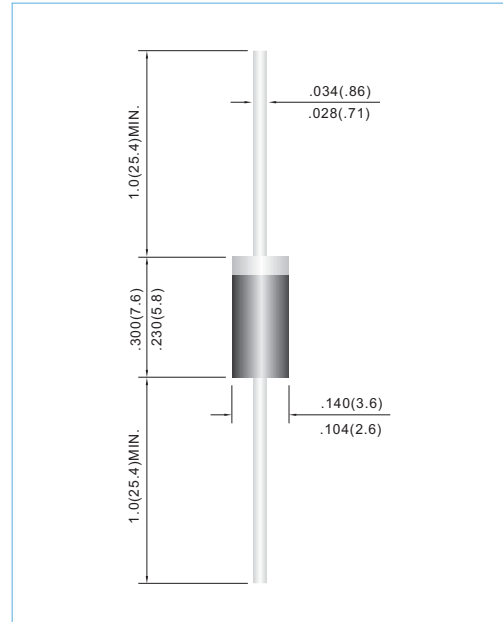
DO-15 Unit: inch(mm)

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.
- 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	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 $T_A=55^\circ\text{C}$	$I_{F(AV)}$	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		1.1		1.7			V	
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	I_R				10.0		500			μA
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				75				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 $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$



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RATING AND CHARACTERISTIC CURVES

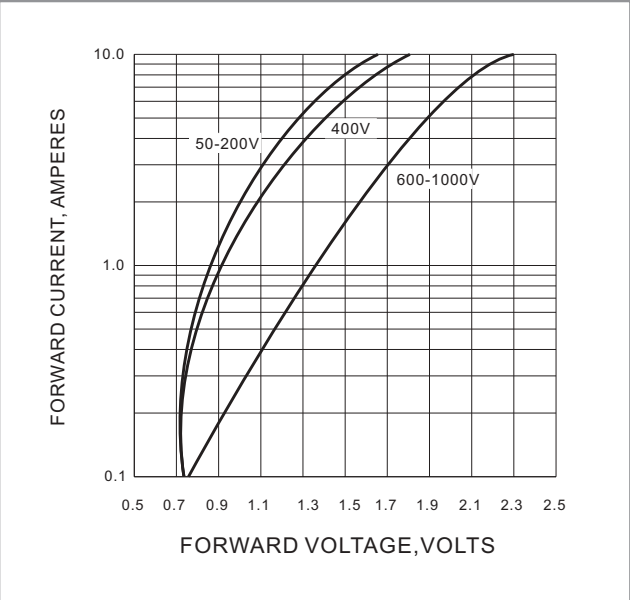


Fig.1 FORWARD CHARACTERISTICS

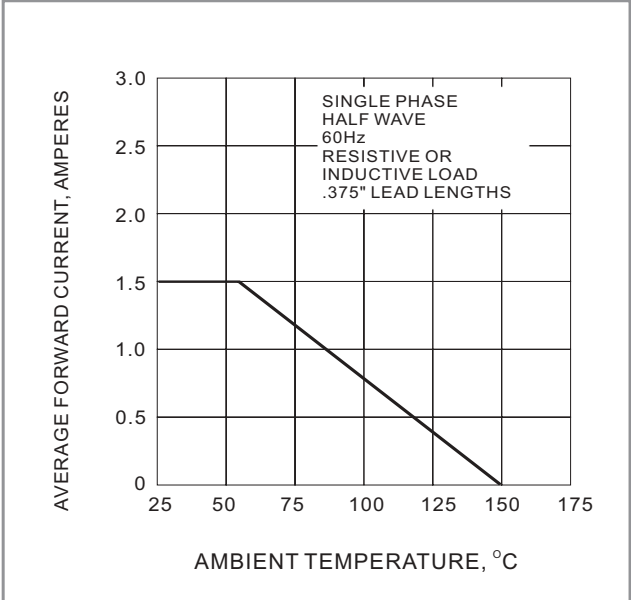


Fig.2 FORWARD CURRENT DERATING CURVE

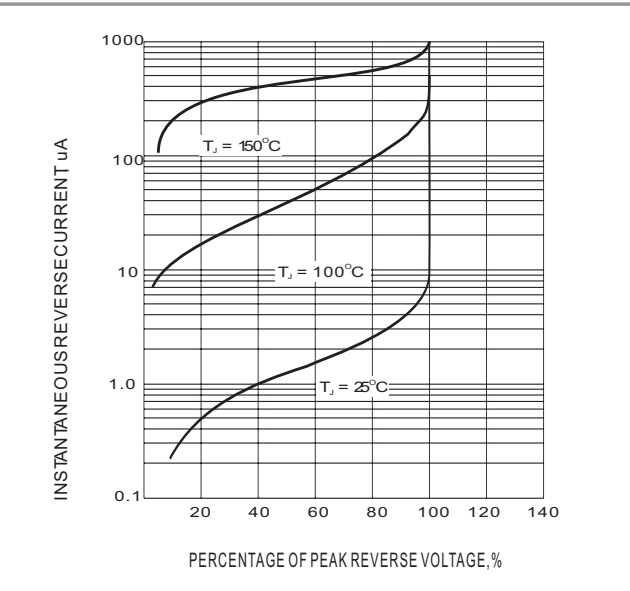


Fig.3-TYPICAL REVERSE CHARACTERISTIC

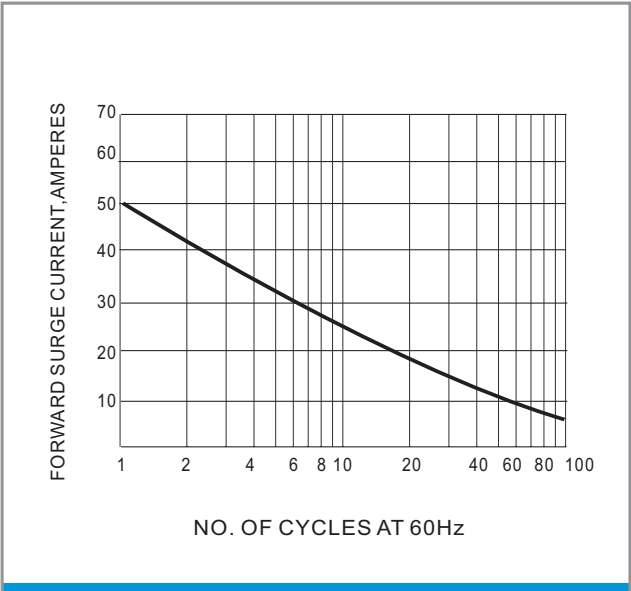


Fig.4 PEAK FORWARD SURGE CURRENT