



DATA SHEET

UF150G thru UF158G

GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 800 Volts **CURRENT** 1.5 Amperes

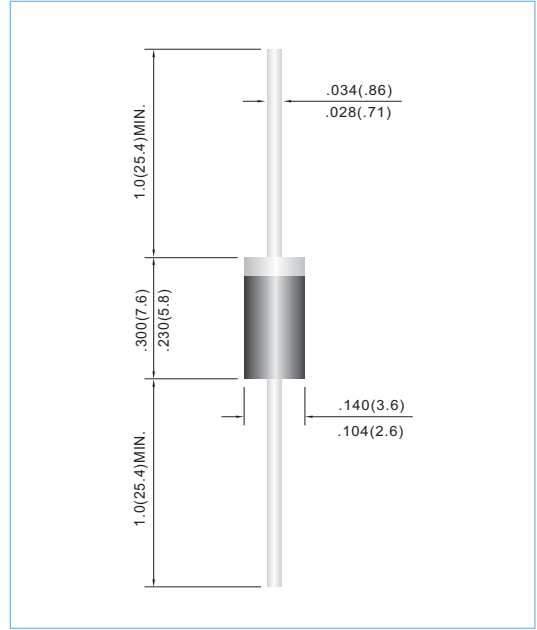
DO-15 Unit: inch(mm)

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.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, DO-15
Terminals: Axial leads, solderable per MIL-STD-202, 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	UF150G	UF151G	UF152G	UF154G	UF156G	UF158G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current .375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	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		1.3		1.7		V
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	10.0 150						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				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 $I_F=.5A$, $I_R=1A$, $I_{rr}=.25A$



RATING AND CHARACTERISTIC CURVES

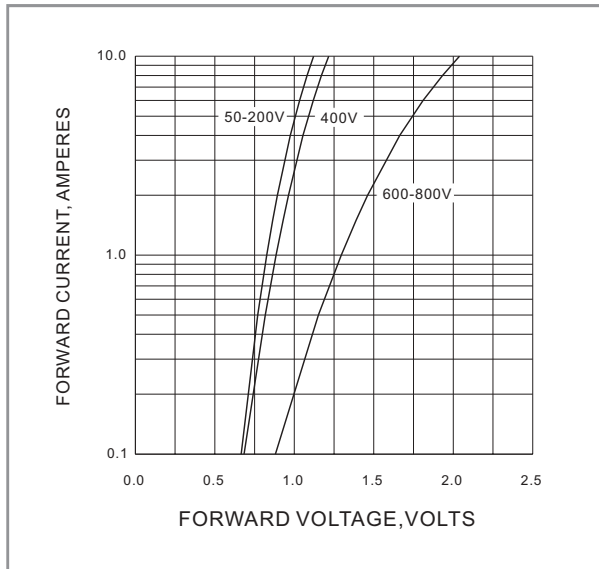


Fig.1 FORWARD CHARACTERISTICS

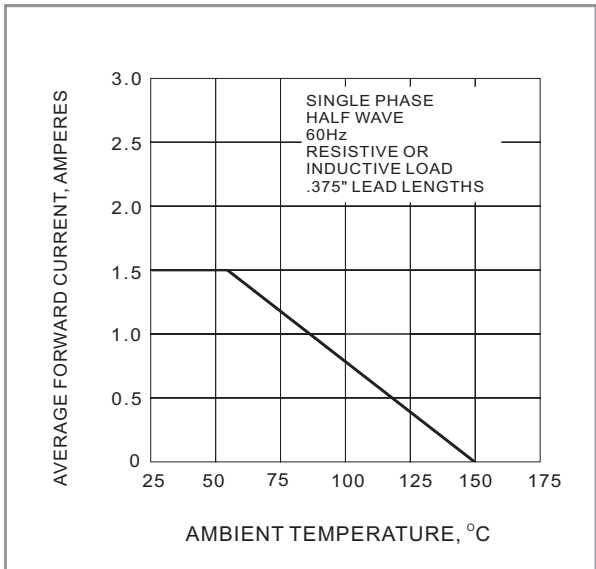


Fig.2 FORWARD CURRENT DERATING CURVE

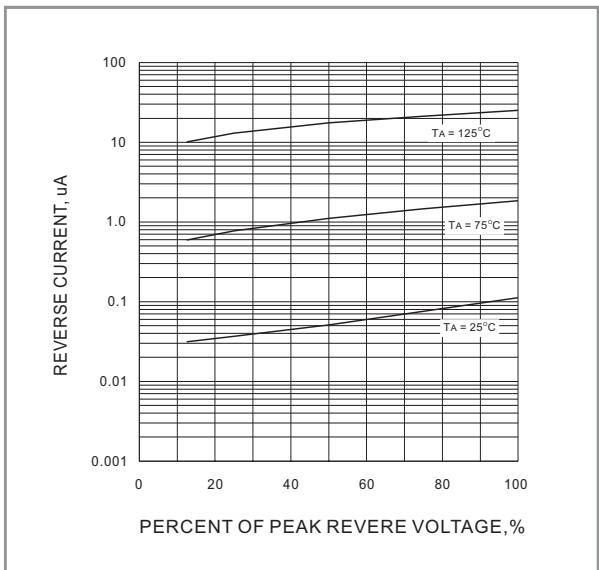


Fig.3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS

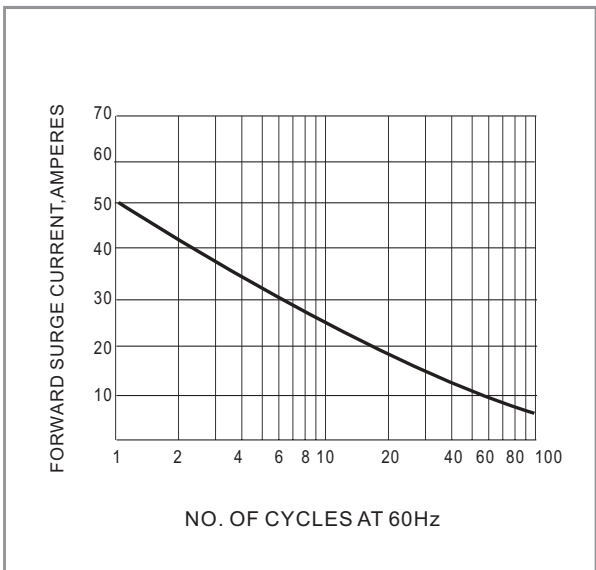


Fig.4 PEAK FORWARD SURGE CURRENT