UF150 THRU UF1510

ULTRAFAST SWITCHING RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

TRANSYS ELECTRONICS LIMITED

FEATURES

Plastic package has Underwriters Laboratory

Flammabi ty Classification 94V-O uti zing

Flame Retardant Epoxy Molding Compound

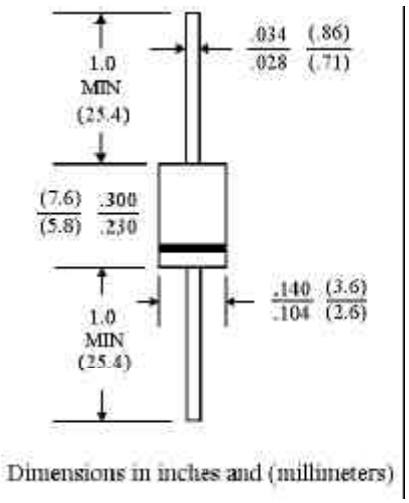
Void-free Plastic in DO-15 package

1.5 ampere operation at T_A=55 ¢J with no thermal runaway

Exceeds environmental standards of MIL-S-19500/228

Ultra fast switching for high efficiency

DO-15



Dimensions in inches and (millimeters)

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 ¢J ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

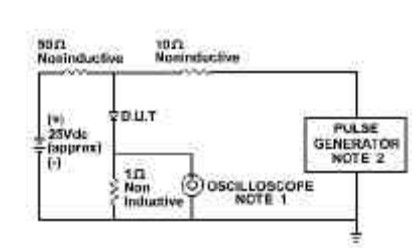
	UF150	UF151	UF152	UF154	UF156	UF158	UF1510	UNITS
Peak Reverse Voltage, Pepetitive ; V_{RM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Blocking Voltage; VR	50	100	200	400	600	800	1000	V
Average Forward Current, Io @T_A=55 ¢J3.8" lead length, 60Hz, resistive or inductive load	1.5							A
Peak Forward Surge Current I_{FM} (surge) 8.3msec. single half sine-wave superimposed on rated load (JEDEC method)	50							A
Maximum Forward Voltage V_F @1.5A, 25 ¢J	1.00			1.10	1.70			V
Maximum Reverse Current, @ Rated T_J=25 ¢J	10.0							£gA
Reverse Voltage T_J=100 ¢J	500							£gA
Typical Junction capacitance (Note 1) CJ	25							pF
Typical Junction Resistance (Note 2) R £KJA	50							¢J/W
Reverse Recovery Time I_F=.5A, I_R=1A, Irr=.25A	50	50	50	50	75	75	75	ns
Operating and Storage Temperature Range	-55 TO +150							¢J

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

UF150 THRU UF1510



NOTE:1.Rise Time = 7ns max.
Input Impedance = 1 megohm. 22pF
2.Rise Time = 10ns max.
Source Impedance = 50 Ohms

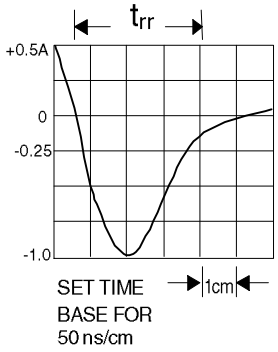


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

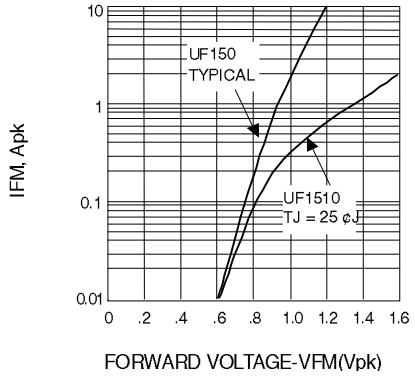


Fig. 2-FORWARD CHARACTERISTICS

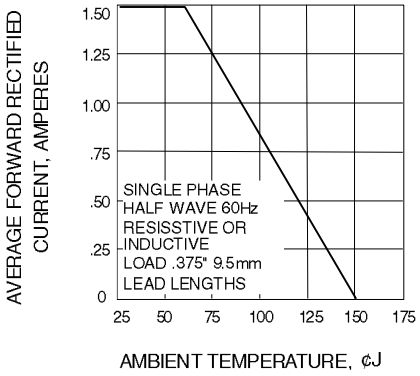


Fig. 3-FORWARD CURRENT DERATING CURVE

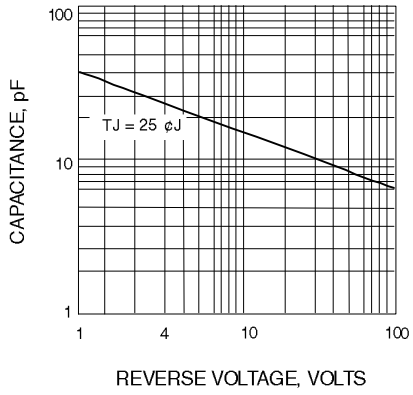


Fig. 4-TYPICAL JUNCTION CAPACITANCE

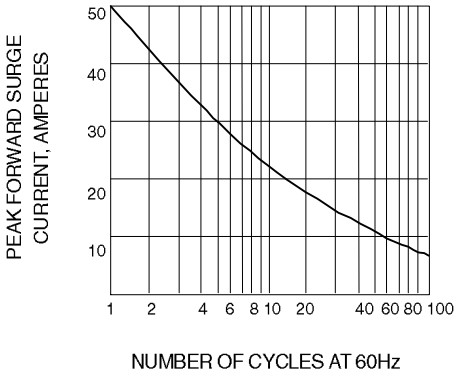


Fig. 5-PEAK FORWARD SURGE CURRENT