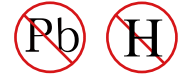




ULTRAFAST SWITCHING RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 3.0 Amperes



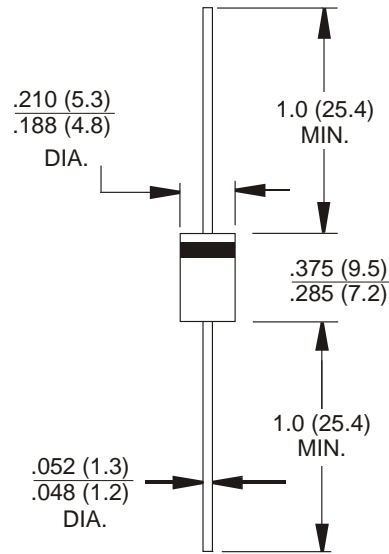
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Void-free Plastic in DO-201AD package
- Exceeds environmental standards of MIL-S-19500/228
- Ultra fast switching for high efficiency
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: Glass passivation, DO-201AD
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Band denotes cathode
- Mounting Position: Any
- Quantify Per Reel : 1200 pcs

DO-201AD Unit:inch(mm)



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	UF300G	UF301G	UF302G	UF304G	UF306G	UF308G	UF3010G	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Current @ T <sub>A</sub> =55°C .3.8" lead length, 60Hz, resistive or inductive load	I <sub>(AV)</sub>	3.0							A	
Peak Forward Surge Current IFM (surge) 8.3msec. single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150							A	
Maximum Forward Voltage V <sub>F</sub> @3.0A	V <sub>F</sub>	1.00		1.3	1.5	1.7		V		
Maximum Reverse Current, @ Rated T <sub>A</sub> =25°C	I <sub>R</sub>	10.0							μA	
Reverse Voltage T <sub>A</sub> =100°C		500							μA	
Typical Junction capacitance (Note 1)	C <sub>J</sub>	50				75			pF	
Typical Junction Resistance (Note 2)	R <sub>θJL</sub>	20.0								°C/W
Reverse Recovery Time I <sub>F</sub> =.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =.25A	T <sub>RR</sub>	50				75			ns	
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150							°C	

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

# DEVICE CHARACTERISTICS

## UF300G THRU UF3100G

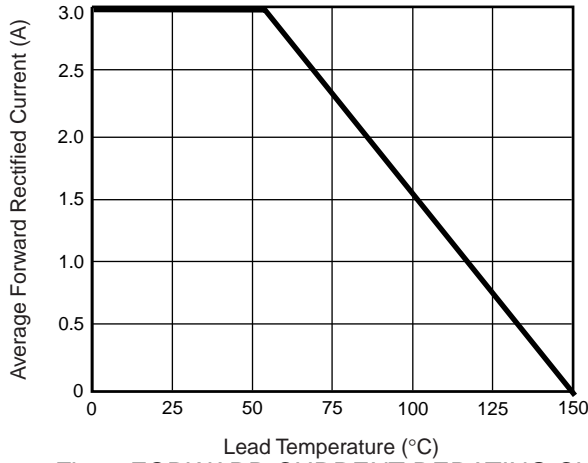


Fig. 1-FORWARD CURRENT DERATING CURVE

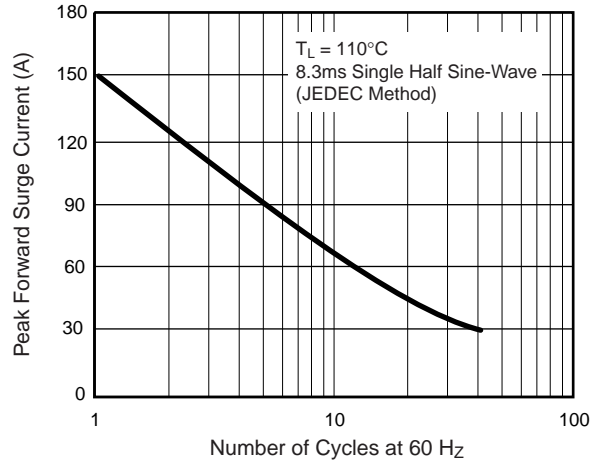


Fig. 2-PEAK FORWARD SURGE CURRENT

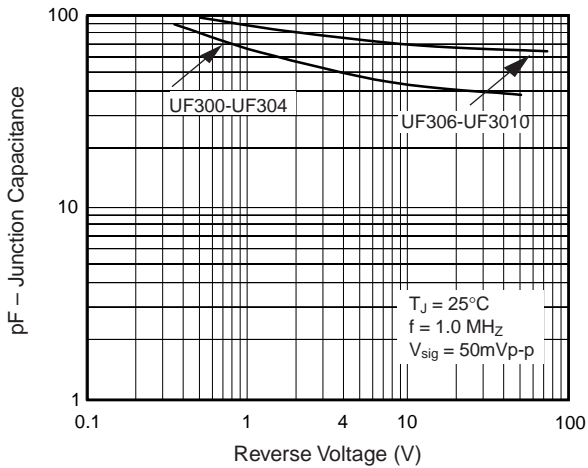


Fig.3 Typical Junction Capacitance

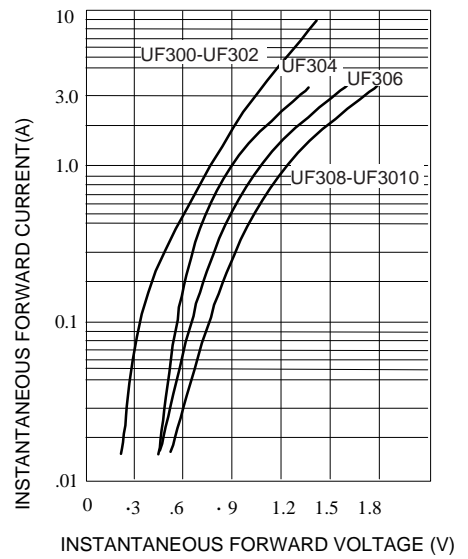


Fig. 4-FORWARD CHARACTERISTICS