



YENYO

UF501G THRU UF507G

Glass Passivated Ultra Fast Recovery Rectifier

Features

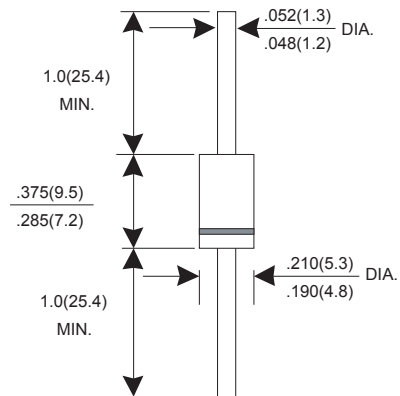
- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Mechanical Data

- * Case: Molded plastic DO-201AD
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202 method 208
- * Polarity: Color band denotes cathode
- * Mounting position: Any
- * Weight: 1.1 grams

**Voltage Range 50 to 1000 V
Current 5.0 Ampere**

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

PARAMTER	SYMBOL	UF 501G	UF 502G	UF 503G	UF 504G	UF 505G	UF 506G	UF 507G	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current $T_L=55^\circ\text{C}$	IF(AV)	5.0							A	
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	150							A	
Maximum Instantaneous Forward Voltage @ 5.0 A	VF	1.0		1.3		1.7			V	
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	IR	5.0				100				uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75				nS
Typical junction Capacitance (Note 2)	CJ	100				65				pF
Typical Thermal Resistance (Note 3)	RθJA	25							°CW	
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150							°C	

NOTES : (1) Reverse recovery test conditions $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$.
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(2) Thermal Resistance junction to lead.

RATINGS AND CHARACTERISTIC CURVES UF501G THRU UF507G

FIG.1 - FORWARD CURRENT DERATING CURVE

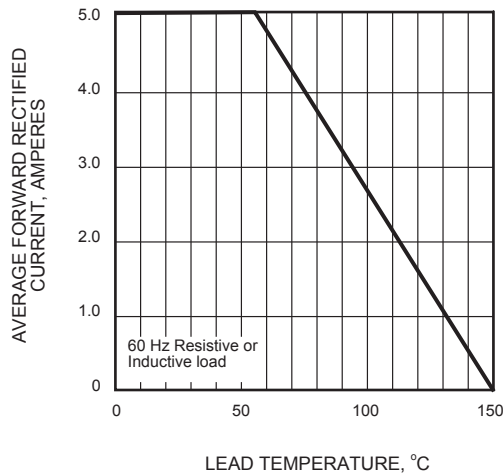


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

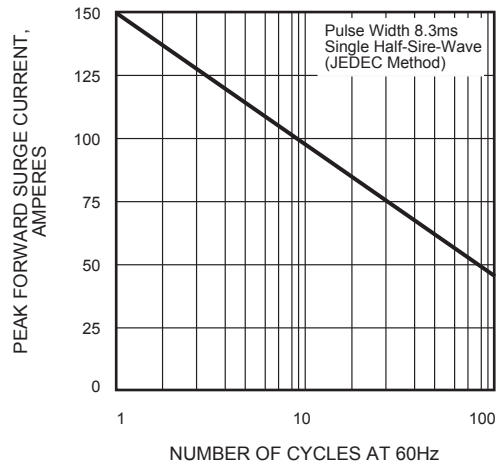


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

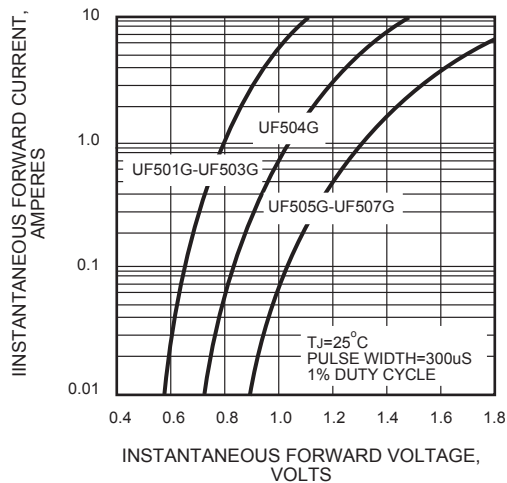


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

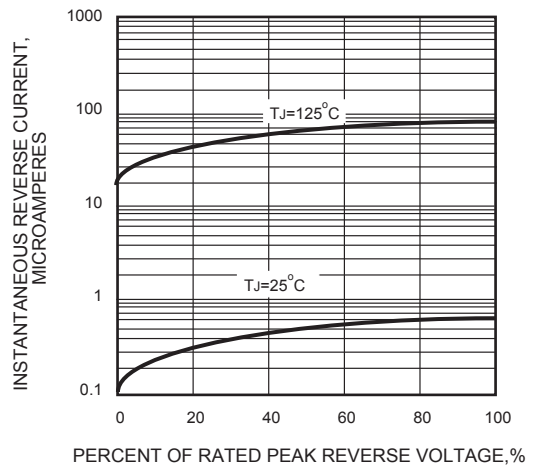


FIG.5 - TYPICAL JUNCTION CAPACITANCE

