
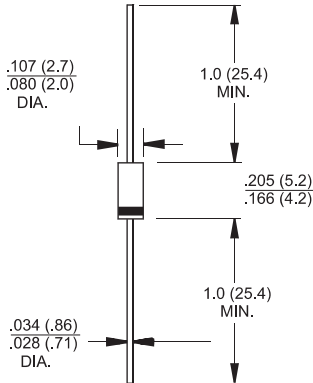


		<h1>UF1A THRU UF1M</h1>							
		<h2>1.0 AMP. Glass Passivated Ultrafast Plastic Rectifiers</h2>							
		<div>Voltage Range 50 to 1000 Volts Current 1.0 Ampere</div>							
<h3>Features</h3> <ul style="list-style-type: none">✧ Plastic package has Underwriters Laboratory Flammability Classification 94V-O✧ Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes✧ Glass passivated chip junction✧ Excellent high temperature switching✧ Ultrafast recovery time for high efficiency✧ Soft recovery characteristics✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension		<h3>DO-204AL (DO-41)</h3> 							
<h3>Mechanical Data</h3> <ul style="list-style-type: none">✧ Case: JEDEC DO-204AL molded plastic body over passivated chip✧ Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026✧ Polarity: Color band denotes cathode end✧ Mounting Position: Any✧ Weight: 0.012 ounce, 0.34 gram		<h3>Dimensions in inches and (millimeters)</h3>							
<h3>Maximum Ratings and Electrical Characteristics</h3> <p>Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%</p>									
Type Number	Symbol	UF1A	UF1B	UF1D	UF1G	UF1J	UF1K	UF1M	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 Rectified Current .375 (9.5mm) Lead Length @ $T_A = 55^{\circ}C$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.0			1.7				V
Maximum DC Reverse Current @ $T_A=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A=100^{\circ}C$	I_R	10.0 50.0							uA uA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50			75				nS
Typical Junction Capacitance (Note 2)	C_j	17.0							pF
Typical Thermal Resistance (Note 3)	$R\theta_{JA}$ $R\theta_{JL}$	60.0 15.0							°C/W
Operating/Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

3. Thermal Resistance from junction to ambient and from Junction to Lead length .375"(9.5mm), Mounted on 0.2" x 0.2" (5mm x 5mm) Cu pads.

RATINGS AND CHARACTERISTIC CURVES (UF1A THRU UF1M)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

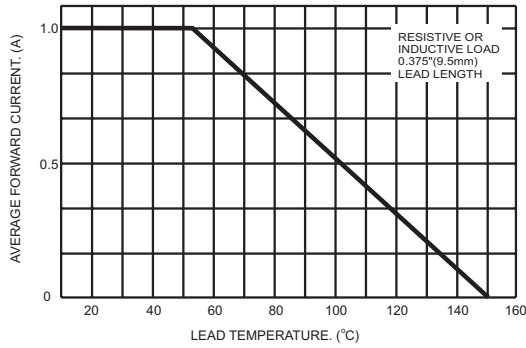


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

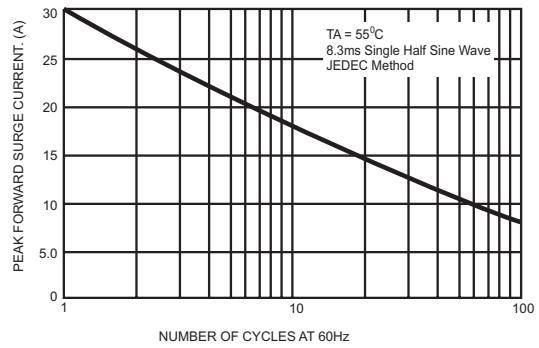


FIG.3- TYPICAL FORWARD CHARACTERISTICS

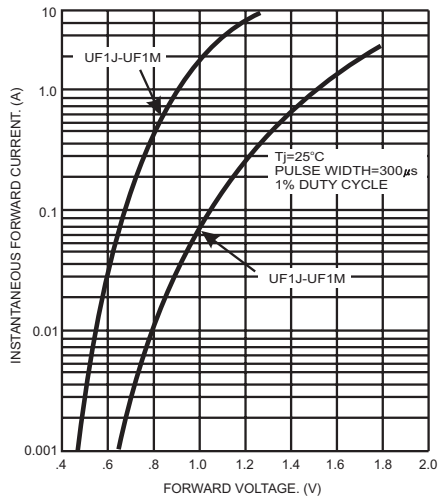


FIG.4- TYPICAL REVERSE CHARACTERISTICS

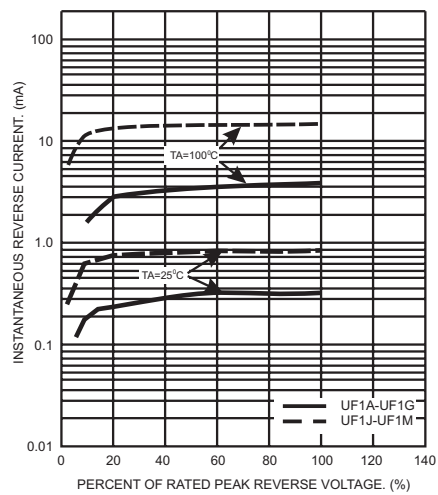


FIG.5- TYPICAL JUNCTION CAPACITANCE

