

UF200 - UF2010

ULTRA FAST SWITCHING RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 2.0 A

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Mechanical Data

- Case: D O 1 5 , Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number







DO-15								
Dim	Min	Max						
Α	25.40	_						
В	5.50	7.62						
С	0.686	0.889						
D	2.60	3.60						
All Dimensions in mm								

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	UF200	UF201	UF202	UF204	UF205	UF206	UF208	UF2010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) $@T_A = 55^{\circ}C$	lo	2.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	60							A	
Forward Voltage @I _F = 2.0A	Vfm	1.0 1.3 1.7					V			
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	Iгм	5.0 100							μA	
Reverse Recovery Time (Note 2)	trr	50 75						nS		
Typical Junction Capacitance (Note 3)	Cj	60 40					pF			
Operating Temperature Range	Tj	-65 to +125							°C	
Storage Temperature Range	Тѕтс	-65 to +150							°C	

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



RATING AND CHARACTERISTIC CURVES UF200 THRU UF2010



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



Fig. 2-FORWARD CHARACTERISTICS



Fig. 4-TYPICAL JUNCTION CAPACITANCE



Fig. 3-FORWARD CURRENT DERATING CURVE



Fig. 5-PEAK FORWARD SURGE CURRENT