UF500- UF5010

ULTRA FAST SWITCHING RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 5.0 A

Features

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

Mechanical Data

Case: DO-201AD, Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

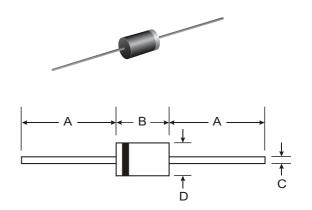
Polarity: Cathode Band

• Weight: 1.2 grams (approx.)

Mounting Position: Any

Marking: Type Number





DO-201AD							
Dim	Min	Max					
Α	25.40	_					
В	8.50	9.53					
С	0.96	1.06					
D	4.80	5.21					
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	UF500	UF501	UF502	UF503	UF504	UF506	UF508	UF5010	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°C	lo	5.0							А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İFSM	150							А	
Forward Voltage @I _F = 5.0A	VFM	1.0 1.3 1.7						V		
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	lгм	10 100							μΑ	
Reverse Recovery Time (Note 2)	trr	50 75						nS		
Typical Junction Capacitance (Note 3)	Cj	75 50						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.



FIG. 1 –TYPICAL FORWARD CURRENT DERATING CURVE

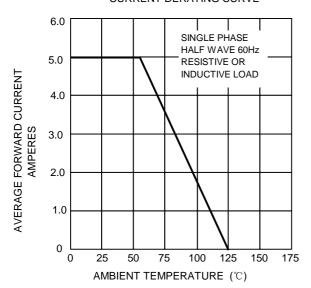
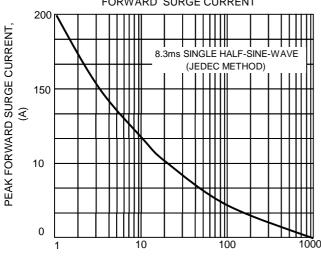


FIG. 4 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

FIG.5 – TYPICAL JUNCTION CAPACITANCE

1000

200

UF500 - UF503

UF504-UF5010

1

0.1

1.0

10

10

10

10

FLG.2 - TYPICAL REVERSE CHARACTERISTICS

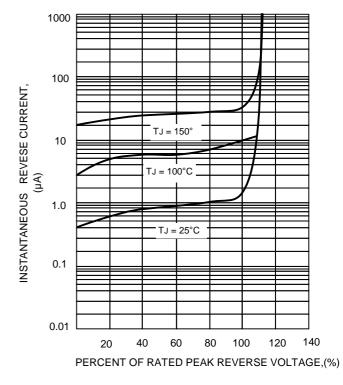
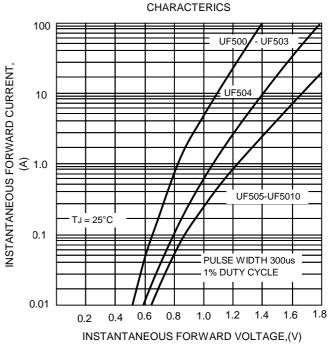


FIG.3-TYPICAL INTANTANEOUS FORWARD CHARACTERICS



www.sunmate.tw