



ULTRAFAST RECOVERY RECTIFIERS

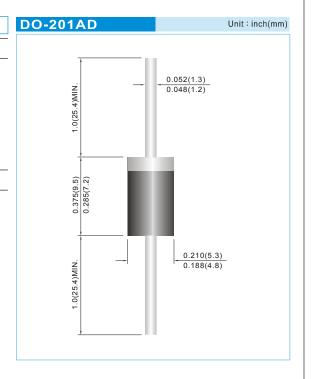
VOLTAGE 50 to 1000 Volts CURRENT 3.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- · Ultra Fast switching for high efficiency.
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- · Polarity: Band denotes cathode
- · Mounting Position: Any
- Weight: 0.0395 ounce, 1.122 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	UF300	UF301	UF302	UF304	UF306	UF308	UF3010	UNITS
Maximum Recurrent Peak Reverse Voltage		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 Current .375"(9.5mm) lead length at T_A =55°C		3.0						А	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150						А	
Maximum Forward Voltage at 3.0A		1.0 1.3 1.7				٧			
Maximum DC Reverse Current at Rated DC T _j =25°C Blocking Voltage T _j =100°C		10.0 750					μА		
Typical Junction Capacitance (Note 1)	C _J	75 50				pF			
Typical Thermal Resistance (Note 2)	$R_{_{\theta JA}} \\ R_{_{\theta JC}}$	20 12			°C / W				
Maximum Reverse Recovery Time (Note 3)		50 75					ns		
Operating Junction and Storage Temperature Range		-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.
- 3. Reverse Recovery Time I_F =.5A , I_R =1A , I_{rr} =.25A

September 21,2010-REV.01 PAGE . 1





RATING AND CHARACTERISTIC CURVES

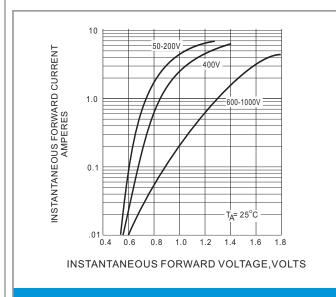
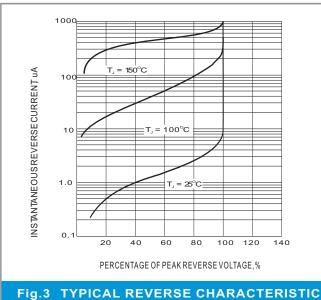


Fig.1 FORWARD CHARACTERISTICS



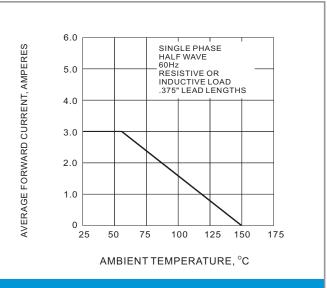


Fig.2 FORWARD CURRENT DERATING CURVE

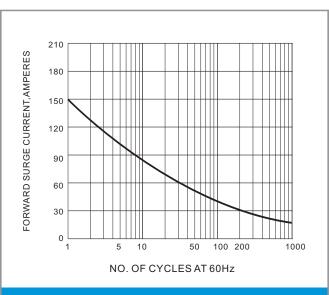


Fig.4 PEAK FORWARD SURGE CURRENT

PAGE . 2 September 21,2010-REV.01





Part No_packing code_Version

UF300_AY_00001 UF300_AY_10001 UF300_B0_00001 UF300_B0_10001 UF300_R2_00001

UF300_R2_10001

For example:



Packing Code XX					Version Code XXXXX			
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code		
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number		
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number		
Bulk Packing (B/P)	В	13"	2					
Tube Packing (T/P)	Т	26mm	X					
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y					
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U					
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D					

September 21,2010-REV.01 PAGE . 3





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September 21,2010-REV.01 PAGE . 4