

SF31 - SF37

3.0A SUPERFAST DIODE



Features

- Diffused Junction
- Low Forward Voltage Drop
- High Surge Current Capability
- High Reliability
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

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
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4



DO-201AD					
Dim	Min	Max			
Α	25.4				
В	7.20	9.50			
С	1.20	1.30			
D	4.80	5.30			
All Dimensions in mm					

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

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

Characteristic	Symbol	SF31	SF32	SF33	SF34	SF35	SF36	SF37	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	150	200	300	400	600	V
RMS Reverse Voltage	VR(RMS)	35	70	105	140	210	280	420	V
Average Rectified Output Current (Note 1) $@T_A = 50^{\circ}C$	lo	3.0					А		
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	125					A		
Forward Voltage $@I_F = 3.0A$	Vfm	0.95			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)	t _{rr}	35						nS	
Typical Junction Capacitance (Note 3)	Сл	80 70				pF			
Typical Thermal Resistance Junction to Ambient (Note 1) Typical Thermal Resistance Junction to Lead (Note 1)	R JA R JL	20 8.5						°C/W	
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 I_{F} = 0.5A, I_{R} = 1.0A, I_{RR} = 0.25A.

3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

SF31 – SF37



www.wontop.com



MARKING INFORMATION



TAPING SPECIFICATIONS

PACKAGING INFORMATION



459 x 214 x 256

12,500

16.0

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.

200 x 85 x 40

2. Components are packed in accordance with EIA standard RS-296-E.

500

BULK



Product No.	Package Type	Shipping Quantity				
SF3x-T3	DO-201AD	1200/Tape & Reel				
SF3x-TB	DO-201AD	1200/Tape & Box				
SF3x	DO-201AD	500 Units/Box				

ORDERING INFORMATION

1. Products listed in **bold** are WTE **Preferred** devices. 2.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department. To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SF31-TB-LF. 3.

WON-TOP ELECTRONICS and *me* are registered trademarks of Won-Top Electronics Co., Ltd (WTE). WTE has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung 806, Taiwan Phone: 886-7-822-5408 or 886-7-822-5410 Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com

We power your everyday.