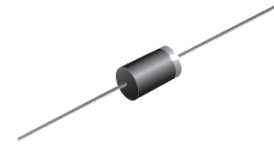


FEATURES

- | Fast switching for high efficiency

- | Low reverse leakage

- | High forward surge current capability



DO-201

MECHANICAL DATA

- | Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

- | Polarity: : Color band denotes cathode end

- | Mounting Position: Any

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Symbol	Parameter	FR301	FR302	FR303	FR304	FR305	FR306	FR307	Unit
	Marking	FR301	FR302	FR303	FR304	FR305	FR306	FR307	
V _{RRM}	Maximum repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS voltage	35	70	140	280	420	560	700	
V _{DC}	Maximum DC blocking voltage	50	100	200	400	600	800	1000	
I _{F(AV)}	Average forward rectified current at T _A =75°C	3.0							A
I _{FSM}	Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	150							
R _{θJA}	Typical thermal resistance ⁽¹⁾	20							°C/W
I _R	Maximum DC reverse current at rated DC blocking voltage	T _A =25°C		5					μA
		T _A =125°C		500					
V _F	Maximum instantaneous forward voltage at 3.0A	1.3							V
t _{rr}	Maximum reverse recovery time ⁽²⁾	150			250	500			nS
C _J	Typical junction capacitance ⁽³⁾	60							pF
T _J	Operating junction temperature rang	-55~+150							°C
T _{STG}	Storage temperature rang	-55~+150							°C

Note:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted
2. Reverse recovery condition I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

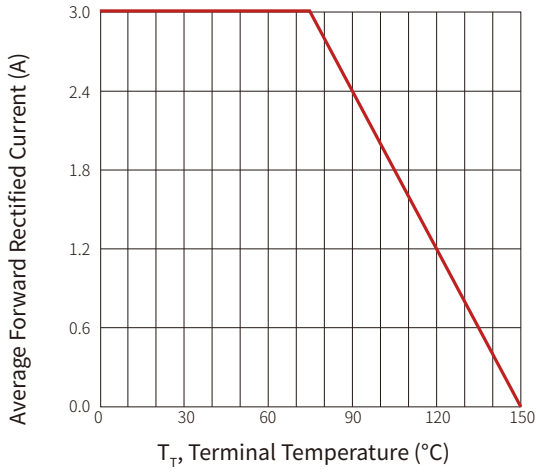


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

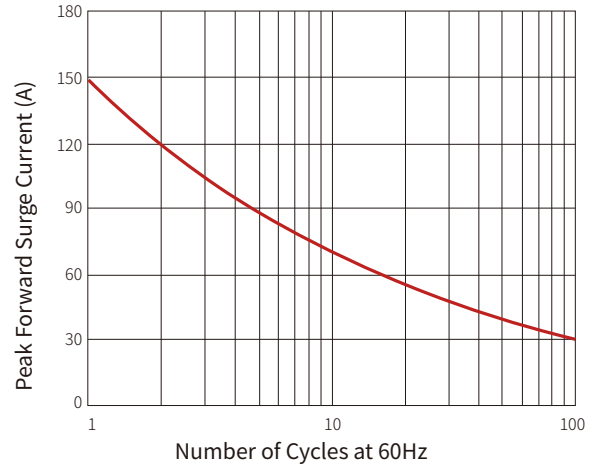


Fig.3 Typical Instantaneous Forward Characteristics

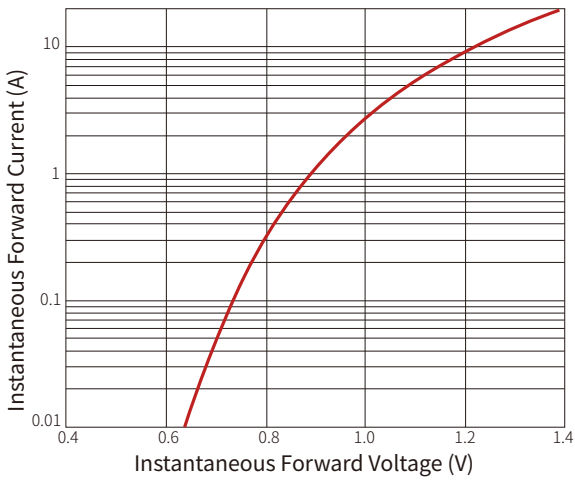
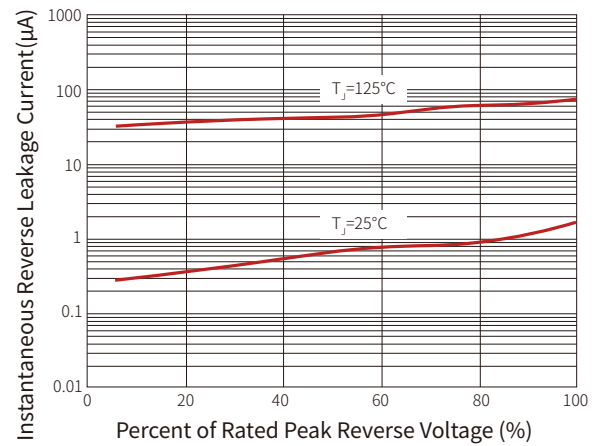
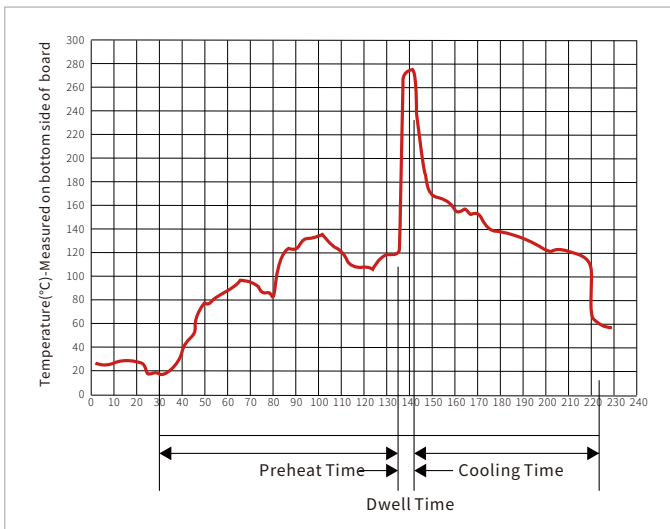


Fig.4 Typical Reverse Characteristics

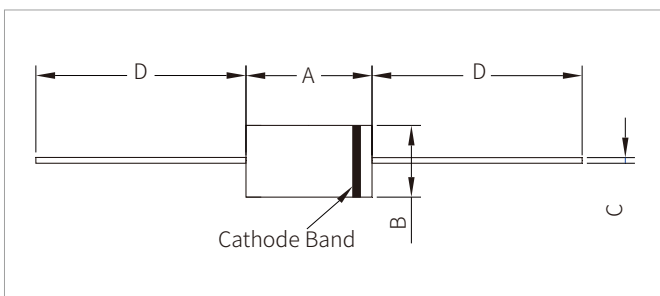


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

DO-201 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	8.50	9.50	0.335	0.375
B	4.80	5.60	0.189	0.220
C	1.10	1.45	0.043	0.057
D	24.00	-	0.945	-

ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
FR301-FR307	DO-201	1250pcs	Reel

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.