

FEATURES

- | Open Junction chip
- | Low reverse leakage
- | High forward surge current capability



DO-41

MECHANICAL DATA

- | Case : Molded plastic body
- | Polarity symbol marking on body
- | Mounting Position : Any

APPROVALS

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

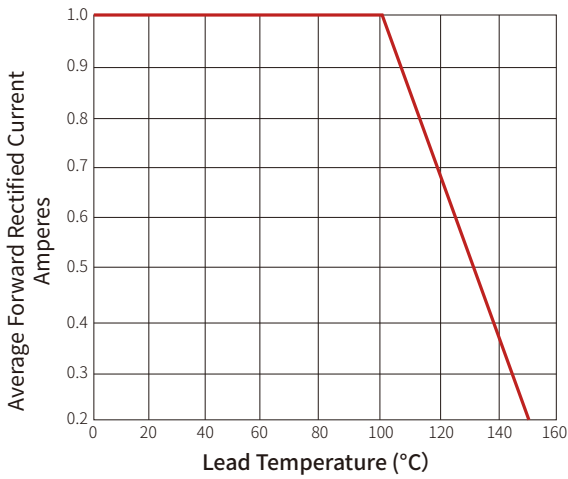
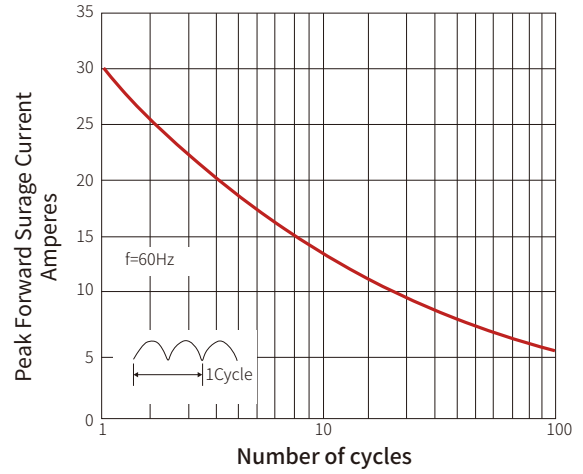
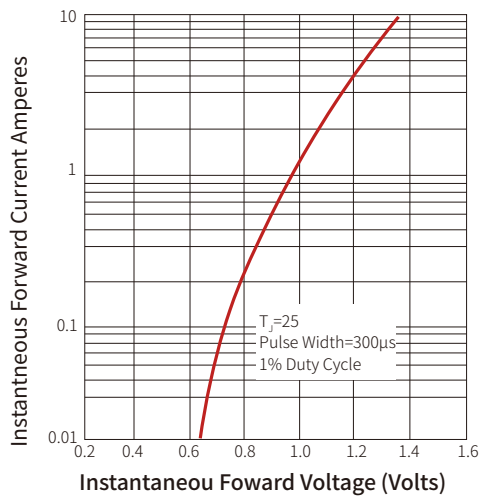
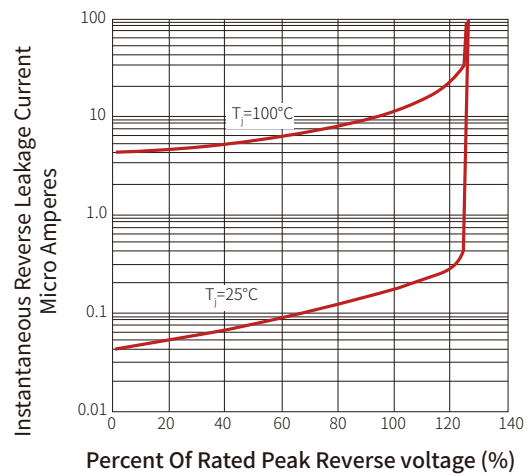
MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

| Parameter | Symbol | 1N4001 | 1N4002 | 1N4003 | 1N4004 | 1N4005 | 1N4006 | 1N4007 | Unit |
|---|-----------------------------------|----------|--------|--------|--------|--------|--------|--------|------|
| Marking | | 1N4001 | 1N4002 | 1N4003 | 1N4004 | 1N4005 | 1N4006 | 1N4007 | |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| Maximum Average Forward Rectified Current at T _L =100°C | I _{F(AV)} | 1.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Singlehalf Sine-Wave | I _{FSM} | 30.0 | | | | | | | |
| Maximum Forward Voltage at I _F =1.0 A | V _F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | T _A =25°C | 5 | | | | | | | μA |
| | T _A =100°C | 200 | | | | | | | |
| Typical Junction Capacitance (Note1) | C _J | 21.0 | | | | | | | pF |
| Typical Thermal Resistance | R _{θJA} | 65.0 | | | | | | | °C/W |
| Operating Junction And Storage Temperature Rang | T _J , T _{STG} | -55~+150 | | | | | | | °C |

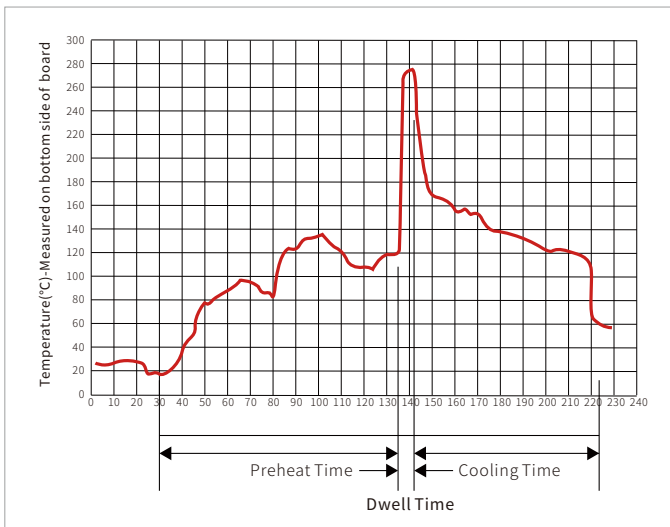
Note:

- 1) Measured at 1MHz and applied reverse voltage of 4.0V D.C

CHARACTERISTIC CURVES

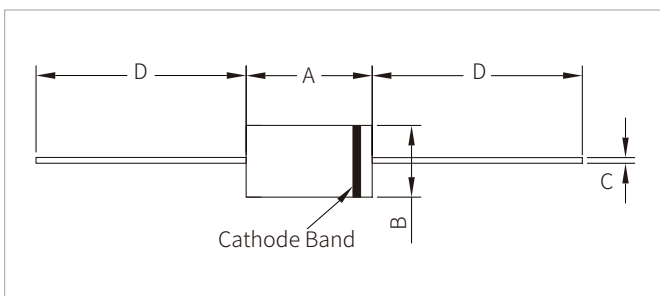
Fig.1 Derating Curve Output Rectified Current**Fig.2 Maximum Non-repetitive Peak Forward Surge Current Perleg****Fig.3 Typical Forward Voltage Characteristics****Fig.4 Typical Reverse Leakage Characteristics**

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-41 PACKAGE INFORMATION



| Ref. | Millimeters | | Inches | |
|------|-------------|------|--------|-------|
| | Min. | Max. | Min. | Max. |
| A | 4.10 | 5.20 | 0.160 | 0.205 |
| B | 2.00 | 2.70 | 0.080 | 0.107 |
| C | 0.71 | 0.86 | 0.028 | 0.034 |
| D | 25.40 | - | 1.000 | - |

ORDERING INFORMATION

| Part Number | Component Package | Per Carton | Description |
|---------------|-------------------|------------|-------------|
| 1N4001-1N4007 | DO-41 | 5000pcs | Box |

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.