

Product	Fast recovery Diode	Package	Through hole molded package
---------	---------------------	---------	-----------------------------

## 1. Life Test

Test Item	Test Method/Standard	Test Condition	n [pcs]	Pn [pcs]
Steady state operation life1	Ta=25°C, Io=Io Tj Max. or less, VR=VR Max. EIAJ ED-4701/100-101	1000h	77	0
Steady state operation life2	Ta=Tstg Max., VR=VR Max. EIAJ ED-4701/100-101	1000h	77	0
Temperature humidity bias	Ta=85°C, Rh=85%, VR=VR Max. EIAJ ED-4701/100-102	1000h	77	0
Temperature cycle	Tstg Min.(30min)~Tstg Max.(30min) EIAJ ED-4701/100-105	100cycle	77	0
Pressure cooker	Ta=121°C, 2atm, Rh=100% JESD22-A102C	48h	77	0
High Temperature storage	Ta=Tstg Max. EIAJ ED-4701/200-201	1000h	77	0
Low Temperature storage	Ta=Tstg Min. EIAJ ED-4701/200-202	1000h	77	0

## 2. Stress Test

Test Item	Test Method/Standard	Test Condition	n [pcs]	Pn [pcs]
Resistance to solder heat1	Dipping into solder bath at 260±5°C. EIAJ ED-4701/300-301	10sec	77	0
Resistance to solder heat2	Dipping leads into solder bath at 350±10°C. EIAJ ED-4701/300-302	3.5sec	77	0
Solderability	Dipping into solder bath at 245±5°C. EIAJ ED-4701/300-302	5sec	77	0
Thermal shock	0 +5 °C(5min) ~ 100 +0 °C(5min) -0 -5 °C(5min) EIAJ ED-4701/300-307	100cycle	77	0
Terminal strength (Pull)	Pull force ; 20N EIAJ ED-4701/400-401	10sec	77	0
Terminal strength (Bending)	Bending load ; 10N EIAJ ED-4701/400-401	2times	77	0

## 3. Measurement Item & Criteria

Item	Condition	Criteria
Forward Voltage (VF)	Par specification	Less than x1.1 of Initial value
Reverse Current (IR)	Par specification	Less than x2 of Initial value
Appearance	Visual inspection with Microscope(15X)	No mechanical damage
Solderability (Reflow)	Visual inspection with Microscope(15X)	Fillet is formed by the side except terminal tip cut side.
For solderability test only (Solder Bath)	Visual inspection with Microscope(15X)	The solder shall adhere to 95% or more of dipped terminal area except terminal tip cut side.

※ Failure criteria : According to the electrical characteristics specified by the specification.

※ Sample standard:[Reliability level:90%][Failure reliability level(λ1):3%][C=0 decision]is adopted.  
And the number of samples is being made 77 in accordance with single sampling inspection plan with exponential distribution type by attribute of MIL-STD-19500.

## Notes

- 1) The information contained herein is subject to change without notice.
- 2) Before you use our Products, please contact our sales representative and verify the latest specifications :
- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.  
Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Products beyond the rating specified by ROHM.
- 4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.
- 5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.
- 6) The Products are intended for use in general electronic equipment (i.e. AV/OA devices, communication, consumer systems, gaming/entertainment sets) as well as the applications indicated in this document.
- 7) The Products specified in this document are not designed to be radiation tolerant.
- 8) For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative : transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.
- 9) Do not use our Products in applications requiring extremely high reliability, such as aerospace equipment, nuclear power control systems, and submarine repeaters.
- 10) ROHM shall have no responsibility for any damages or injury arising from non-compliance with the recommended usage conditions and specifications contained herein.
- 11) ROHM has used reasonable care to ensure the accuracy of the information contained in this document. However, ROHM does not warrant that such information is error-free, and ROHM shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.
- 12) Please use the Products in accordance with any applicable environmental laws and regulations, such as the RoHS Directive. For more details, including RoHS compatibility, please contact a ROHM sales office. ROHM shall have no responsibility for any damages or losses resulting from non-compliance with any applicable laws or regulations.
- 13) When providing our Products and technologies contained in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, including without limitation the US Export Administration Regulations and the Foreign Exchange and Foreign Trade Act.
- 14) This document, in part or in whole, may not be reprinted or reproduced without prior consent of ROHM.



Thank you for your accessing to ROHM product informations.  
More detail product informations and catalogs are available, please contact us.

## ROHM Customer Support System

<http://www.rohm.com/contact/>