

Product	Bipolar Transistor	Package	SOT-416(EMT3)
---------	--------------------	---------	---------------

1. TEST RESULT

TEST ITEM	TEST CONDITION	STANDARD	n[pcs] (Sample QTY.)	Pn[pcs] (NG QTY.)
Soldering heat resistance	260±5°C , 30sec. , Reflow method 3times	JESD22-A111	22	0
	260±5°C , 10sec. , Solder-bath		22	0
	350±10°C , 3sec. , Hand soldering		22	0
Solderability	245±5°C , 3sec. , Reflow method	J-STD-002	22	0
	245±5°C , 3sec. , Solder-bath	JESD22-B102	22	0
Temperature cycle	-55±5°C → 150±5°C 200cycles	JESD22-A104	22	0
High temp. high humidity reverse bias	85±2°C, 85±5%RH, specified bias ,1000hours	JESD22-A101	22	0
Pressure cooker test	121±2°C , 100%RH , 203kPa , 100hours	JESD22-A102	22	0
High temperature reverse bias	Tj max., specified bias , 1000hours	JESD22-A108	22	0
High temperature gate bias	Tj max, VGSS(max), , 1000hours	JESD22-A108	22	0
Intermittent Operation Life or Power and Temperature Cycle	Ta=25±5°C、 $\Delta T_j \geq 100^\circ\text{C}$ 、 ON 120s/OFF 120s per cycle Duration: 15000cycles	MIL-STD-750 Method 1037	22	0
	Ta=-40(+0/-10)°C~+85(+10/-0)°C、 ON 300s/OFF 300s per cycle Duration: 6000cycles	JESD22 A-105		
Lead strength (lead pull)	Sample body fixed, pulling lead axis direction , 1.0N , 10±1sec.	JEITA ED-4701/400 Test Method 401	22	0

2. MEASUREMENT ITEM & CRITERIA

ITEM	CONDITION	CRITERIA	
Cutoff current : ICBO	Per specification	According to the electrical characteristics specified by the specification	
Cutoff current : IEBO	Per specification		
DC current gain : hFE	Per specification		
Physical	Visual check	No outstanding change in physical.	
Solderability	Visual check	Reflow Soldering	Immersed surface, other than the end of pin as cut-surface, must be covered by solder.
		Solder-bath	More than 95% of the electrode must be covered with solder.

3. JUDGEMENT

No failure is observed from each test item.

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 warrants 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 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/>

General Precaution

1. Before you use our Products, you are requested to carefully read this document and fully understand its contents. ROHM shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any ROHM's Products against warning, caution or note contained in this document.
2. All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using ROHM's Products, please confirm the latest information with a ROHM sales representative.
3. The information contained in this document is provided on an "as is" basis and ROHM does not warrant that all information contained in this document is accurate and/or error-free. ROHM shall not be in any way responsible or liable for any damages, expenses or losses incurred by you or third parties resulting from inaccuracy or errors of or concerning such information.