

Product	Transistor	Grade	Standard
Package	MPT3	JEDEC Code	SOT-89
Type	2SAR513P5T100	Sample Size	30pcs

### 1. CHARGED DEVICE MODEL (CDM) / デバイス帯電モデル静電破壊試験

Table1 Charged device model ESD test results for each testing standards  
各規格におけるデバイス帯電モデル静電破壊試験結果

STANDARD	TEST TYPE	CLASS
JEDEC JESD22-C101F	FI-CDM	C3
JEITA ED-4701/302	FI-CDM (Condition:A)	IV

### 2. HUMAN BODY MODEL (HBM) / 人体モデル静電破壊試験

Table3 Human body model ESD test results for each testing standards  
各規格における人体モデル静電破壊試験結果

STANDARD	TEST TYPE	CLASS
JEDEC JESD22-A114F	Human body model (Contact mode)	3A
JEITA ED-4701/302	Human body model (Contact mode)	2

### 3. NOTICE / 注意事項

This product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Proper handling in the manufacturing process and storage conditions are required to prevent voltage exceeding the product maximum rating to be applied to the products. Electro-static protection are preferred; grounding human body and equipment, isolation from charged objects, ionizer, friction prevention, temperature and humidity control, etc..

本製品は静電気に対して敏感な製品であり、静電気放電等により破壊することがあります。取り扱い時や工程での実装時、保管時において静電気対策を実施のうえ、絶対最大定格以上の過電圧等が印加されないようにご使用ください。特に乾燥した環境では静電気が発生しやすくなるため、十分な静電気対策を実施ください。（人体及び設備のアース、帯電物からの隔離、イオナイザの設置、摩擦防止、温湿度管理、はんだごてのこて先のアース等）

## 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.
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- 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.
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