

Product	MOSFET	Grade	Automotive
Package	UMT6	JEDEC Code	SOT-363
Type	UMD12NFHA		

1. CHARGED DEVICE MODEL (CDM)

Table1 CHARGED DEVICE MODEL ESD IMMUNITY FOR EACH TESTING STANDARDS (Tr1/NPN)

STANDARD	TEST TYPE	TEST LEVEL	RESULT	CLASS
JEDEC JESD22-C101	FI-CDM	1000V	PASS	C3
JEITA ED-4701/302	FI-CDM (Condition:A)	1000V	PASS	IV
AEC AEC-Q101-005	FI-CDM	1000V	PASS	C5

Table2 CHARGED DEVICE MODEL ESD IMMUNITY FOR EACH TESTING STANDARDS (Tr2/PNP)

STANDARD	TEST TYPE	TEST LEVEL	RESULT	CLASS
JEDEC JESD22-C101	FI-CDM	1000V	PASS	C3
JEITA ED-4701/302	FI-CDM (Condition:A)	1000V	PASS	IV
AEC AEC-Q101-005	FI-CDM	1000V	PASS	C5

2. HUMAN BODY MODEL (HBM)

Table3 HUMAN BODY MODEL ESD IMMUNITY FOR EACH TESTING STANDARDS (Tr1/NPN)

STANDARD	TEST TYPE	TEST CONDITION	TEST LEVEL	RESULT
JEDEC JESD22-A114	Human body model (Contact mode)	C=100pF, R=1.5kΩ	500V	PASS
JEITA ED-4701/302	Human body model (Contact mode)	C=100pF, R=1.5kΩ	500V	PASS
AEC AEC-Q101-001	Human body model (Contact mode)	C=100pF, R=1.5kΩ	500V	PASS

Table4 HUMAN BODY MODEL ESD IMMUNITY FOR EACH TESTING STANDARDS (Tr2/PNP)

STANDARD	TEST TYPE	TEST CONDITION	TEST LEVEL	RESULT
JEDEC JESD22-A114	Human body model (Contact mode)	C=100pF, R=1.5kΩ	500V	PASS
JEITA ED-4701/302	Human body model (Contact mode)	C=100pF, R=1.5kΩ	500V	PASS
AEC AEC-Q101-001	Human body model (Contact mode)	C=100pF, R=1.5kΩ	500V	PASS

3. NOTICE

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. Caution especially required in dry environment (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of Ionizer, friction prevention and temperature / humidity control).

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.
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- 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.
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