

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

# CONSTITUTION MATERIALS LIST

The RoHS directive, REACH regulation, and other laws and regulations related to the management of environmentally hazardous substances come into effect. When developing products, the global environmental load must be considered. ROHM pursues green procurement and endeavors to increase the detection accuracy of chemicals contained in parts and procured materials while at the same time placing great importance on the internal chemical management system that was built to ensure that no prohibited substances are procured, used, or shipped in order to provide a steady supply of worry-free products.

DI-TO-247-JE\_Rev.6

Type	Package Code	ROHM Package	Mass (mg)	Part No.
Diode	TO-247N	TO-247N	6417.6000	-

No	Part Name	Weight (mg)	Substance Name	CAS No	Weight (mg)	Portion vs. Products	Portion vs. Part Name
1	Mold compound	1946.8063	Silica (amorphous)	60676-86-0	1696.6417	26.44%	87.15%
			Epoxy resin	-	146.0105	2.28%	7.50%
			Phenol resin	-	97.3403	1.52%	5.00%
			Carbon black	1333-86-4	6.8138	0.11%	0.35%
			<i>Subtotal</i>		<i>1946.8063</i>	<i>30.34%</i>	<i>100%</i>
2	Lead frame (Base material)	4419.3157	Copper (Cu)	7440-50-8	4413.7916	68.78%	99.88%
			Tin (Sn)	7440-31-5	5.5241	0.09%	0.13%
			<i>Subtotal</i>		<i>4419.3157</i>	<i>68.86%</i>	<i>100%</i>
3	Lead frame (Surface treatment)	0.8082	Nickel (Ni)	7440-02-0	0.8082	0.01%	100.00%
			<i>Subtotal</i>		<i>0.8082</i>	<i>0.01%</i>	<i>100%</i>
4	External plating	5.7262	Tin (Sn)	7440-31-5	5.7262	0.09%	100.00%
			<i>Subtotal</i>		<i>5.7262</i>	<i>0.09%</i>	<i>100%</i>
5	Die	3.2458	Silicon (Si)	7440-21-3	3.1672	0.05%	97.58%
			Nickel (Ni)	7440-02-0	0.0419	0.001%	1.29%
			Silver (Ag)	7440-22-4	0.0260	0.0004%	0.80%
			Gold (Au)	7440-57-5	0.0107	0.0002%	0.33%
			<i>Subtotal</i>		<i>3.2458</i>	<i>0.05%</i>	<i>100%</i>
6	Die attach	28.5768	Lead (Pb) *1	7439-92-1	25.1476	0.39%	88.00%
			Tin (Sn)	7440-31-5	2.8577	0.045%	10.00%
			Silver (Ag)	7440-22-4	0.5715	0.009%	2.00%
			<i>Subtotal</i>		<i>28.5768</i>	<i>0.45%</i>	<i>100%</i>
7	Bonding wire	13.1211	Aluminum (Al)	7429-90-5	13.1211	0.20%	100.00%
			<i>Subtotal</i>		<i>13.1211</i>	<i>0.20%</i>	<i>100%</i>
			<i>Total</i>	-	<i>6417.6000</i>	<i>100%</i>	-

## Note

\*1 : It is exempted from the RoHS, because of the high melting point solder.

## Disclaimer

- All information in this document is furnished for exploratory or indicative purposes only.
- This information provides estimates of the average weights and content of component materials. and does not include impurities or metals diffused in the silicon.
- ROHM strives for the accuracy of the information, however, ROHM does not give any representations or warranties as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.
- ROHM may make changes to information published in this document at any time and without notice.

## 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/>